

10/690,671

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(FILE 'HOME' ENTERED AT 15:36:41 ON 04 APR 2006)

FILE 'REGISTRY' ENTERED AT 15:37:14 ON 04 APR 2006

L1           STRUCTURE UPLOADED  
L2        33 S L1  
L3        STRUCTURE UPLOADED  
L4        3 S L3  
L5      569 S L3 SSS FUL

FILE 'CPLUS' ENTERED AT 15:47:58 ON 04 APR 2006

L6      260 S L5

FILE 'REGISTRY' ENTERED AT 15:49:00 ON 04 APR 2006

L7           STRUCTURE UPLOADED  
L8        441 S L7 SUB=L5 FUL  
L9        128 S L5 NOT L8  
L10      231 S L5 AND NRS>3  
L11      214 S L8 AND L10  
L12      17 S L10 NOT L11

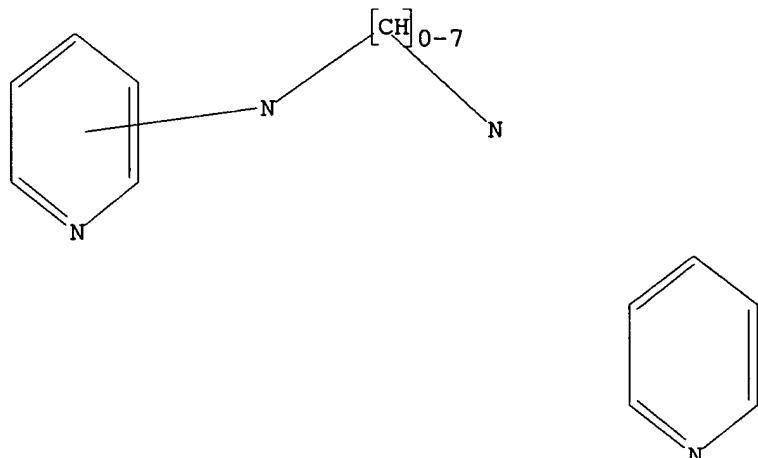
FILE 'CPLUS' ENTERED AT 15:54:22 ON 04 APR 2006

L13     39 S L11

=> d 11

L1 HAS NO ANSWERS

L1           STR



Structure attributes must be viewed using STN Express query preparation.

=> d 13

L3 HAS NO ANSWERS

L3           STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

~~10/690,671~~

L13 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2006:53816 CAPLUS  
DOCUMENT NUMBER: 144:143032  
TITLE: Modulation of glycogen synthase kinase-3 $\beta$  (GSK-3 $\beta$ ) and method of treating proliferative disorders  
INVENTOR(S): Yu, Qiang  
PATENT ASSIGNEE(S): Agency for Science, Technology and Research, Singapore  
SOURCE: PCT Int. Appl., 67 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006006939	A1	20060119	WO 2005-SG223	20050708
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2004-586296P P 20040709

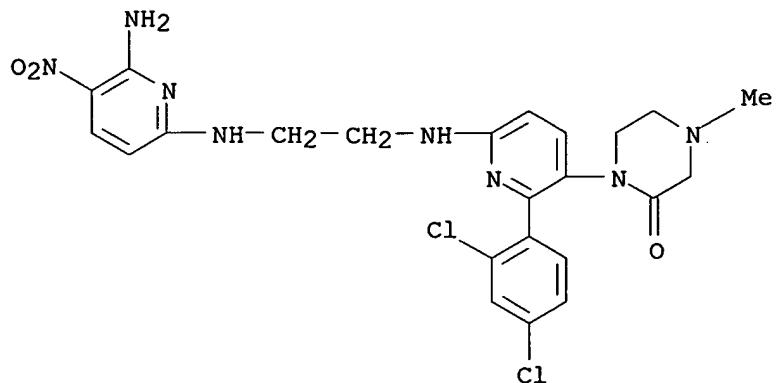
AB The invention provides methods and uses for promoting cell death, when combined with chemotherapeutic agents, in an abnormally proliferating cell, and for treating a proliferative disorder in a subject, which methods and uses involve contacting a cell with, or administering to a subject, an agent that modulates glycogen synthase kinase-3 $\beta$  activity to a cell that is being treated with a chemotherapeutic agent.

IT 403808-62-8, LY 2119301

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(glycogen synthase kinase-3 $\beta$  modulators in treatment of proliferative disorders)

RN 403808-62-8 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



IT **403808-62-8D, LY 2119301, analogs**

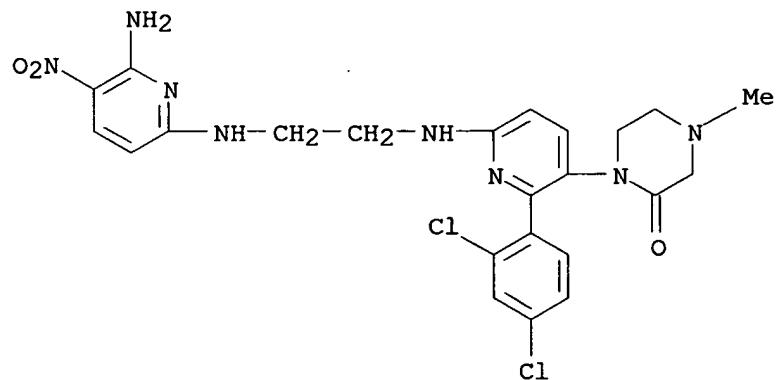
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(glycogen synthase kinase-3 $\beta$  modulators in treatment of  
proliferative disorders)

RN 403808-62-8 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

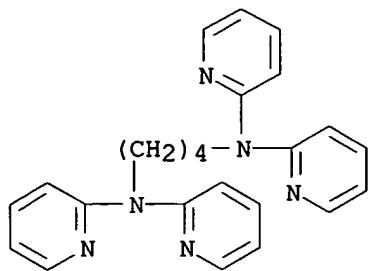
THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

D13 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:504127 CAPLUS  
DOCUMENT NUMBER: 143:431462  
TITLE: Dinuclear and mononuclear platinum(II) and palladium(II) complexes with modified 2,2'-dipyridylamine ligands featuring a cisplatin analogous structure motif  
AUTHOR(S): Fakih, Sarah; Tung, Wing Chau; Eierhoff, Dirk; Mock, Christian; Krebs, Bernt  
CORPORATE SOURCE: Institut fuer Anorganische und Analytische Chemie, Westfaelischen Wilhelms-Universitaet, Muenster, Germany  
SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie (2005), 631(8), 1397-1402  
CODEN: ZAACAB; ISSN: 0044-2313  
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB In modern cancer therapy the clin. application of platinum-based drugs is more and more limited by the occurrence of intrinsic or acquired resistances. In this context the potential use of dinuclear platinum complexes in chemotherapy is increasingly relevant. The novel complexes Pd(Bzdpd)Cl<sub>2</sub>, Pd<sub>2</sub>(C<sub>4</sub>H<sub>8</sub>(dpa)<sub>2</sub>)Cl<sub>4</sub>, and Pt<sub>2</sub>(C<sub>4</sub>H<sub>8</sub>(dpa)<sub>2</sub>)Cl<sub>4</sub> allow a direct comparison of mono- and dinuclear palladium and platinum complexes resp. deriving from a 2,2'-dipyridylamine (Hdpa) ligand system. They were characterized by single crystal x-ray anal. as well as IR spectroscopy and elemental anal. The cisplatin analogous mononuclear palladium complex Pd(Bzdpd)Cl<sub>2</sub> (1, Bzdpd = benzylbis(2-pyridyl)amine) belongs to a range of 2,2'-dipyridylamine-based compds. which were extensively studied in the authors' labs. 1 Crystallizes in the orthorhombic space group Pna21 with a 13.722(3), b 13.457(3), c 9.483(2) Å, and Z = 4. The metal binding motif of 1 was expanded by a flexible butanediyl-linker to form the tetradequate C<sub>4</sub>H<sub>8</sub>(dpa)<sub>2</sub> ligand. The resulting isotypic dinuclear complexes Pd<sub>2</sub>(C<sub>4</sub>H<sub>8</sub>(dpa)<sub>2</sub>)Cl<sub>4</sub>·4CH<sub>3</sub>N (2) and Pt<sub>2</sub>(C<sub>8</sub>(dpa)<sub>2</sub>)Cl<sub>4</sub>·2CH<sub>3</sub>CN (3) crystallize in the triclinic space group P.hivin.1 with a 7.8427(2), b 8.7940(2), c 11.7645(3) Å, α 79.219(2), β 84.033(2), γ 87.744(2)° (2) and a 7.831(5), b 8.814(5), c 11.817(5) Å, α 79.271(5), β 83.571(5), γ 88.063(5)° (3), both with one centrosym. mol. in the unit cell.

IT **868159-27-7P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of palladium (benzyl)dipyridylamine chloro mononuclear and palladium and platinum butanediylbis(dipyridylamine) chloro dinuclear complexes)

RN 868159-27-7 CAPLUS  
CN 1,4-Butanediamine, N,N,N',N'-tetra-2-pyridinyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

32

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1S ANSWER 3 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:1106717 CAPLUS  
 DOCUMENT NUMBER: 143:326169  
 TITLE: NO-release ability and DNA-damage activity of aromatic  
 N-nitroso compounds  
 AUTHOR(S): Tanno, Masayuki; Sueyoshi, Shoko; Fukuhara, Kiyoshi;  
 Miyata, Naoki; Okuda, Haruhiro  
 CORPORATE SOURCE: National Institute of Health Sciences, Tokyo,  
 158-8501, Japan  
 SOURCE: Kokuritsu Iyakuhin Shokuhin Eisei Kenkyusho Hokoku  
 (2004), 122, 10-15  
 CODEN: KISHFC; ISSN: 1343-4292  
 PUBLISHER: Kokuritsu Iyakuhin Shokuhin Eisei Kenkyusho Kagaku  
 Busshitsu Johobu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese

AB To develop a new nitric oxide-donor (NO-donor) that is useful for chemical and biochem. research, we synthesized several aromatic N-nitroso compds. including 1-[N-nitroso-N-(4-tolyl)carbamoyl]piperidine-4-carboxylic acid (1f) and phenyl(2-pyridyl)-N-nitrosamines, which spontaneously generate NO at ambient temperature Thermal decomposition of these compds. was run under

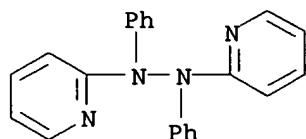
mild conditions. Gaseous NO released from them was quantified by means of the Griess reaction using a specially designed apparatus in which NO<sub>2</sub><sup>-</sup> is generated from NO. The structure of products arose from the radical cleavage of N-NO bond was clarified by chemical and spectral studies. Generation of NO from the N-nitroso compds. was also confirmed by ESR spectroscopy. The action of these NO-releasing compds. against DNA was examined When the pBR 322 DNA was treated with 1f at 37° for 3 h, the DNA single-strand breaks was 31% for 1 mM of 1f. The denitrosated compound and sodium nitrite did not show any effective DNA-cleaving activity. On the other hand, aromatic N-nitrosamines induced weak DNA-cleaving activity under the same condition.

IT 865476-16-0

RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)  
 (degradation product; NO-release ability and DNA-damage activity of aromatic  
 N-nitroso compds.)

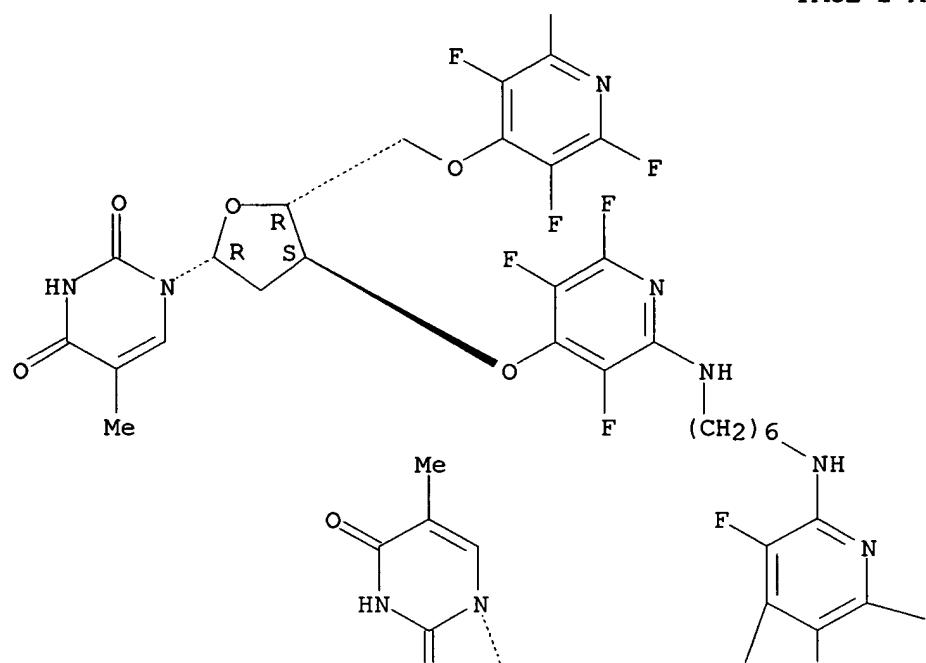
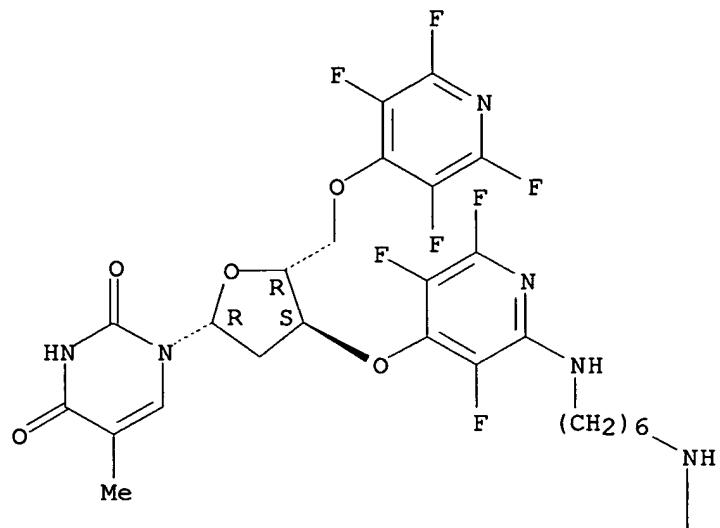
RN 865476-16-0 CAPLUS

CN Pyridine, 2,2'-(diphenylhydrazo)bis- (9CI) (CA INDEX NAME)

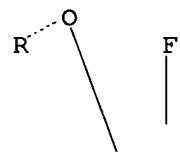
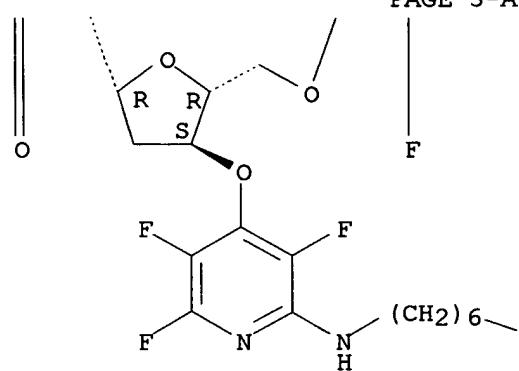


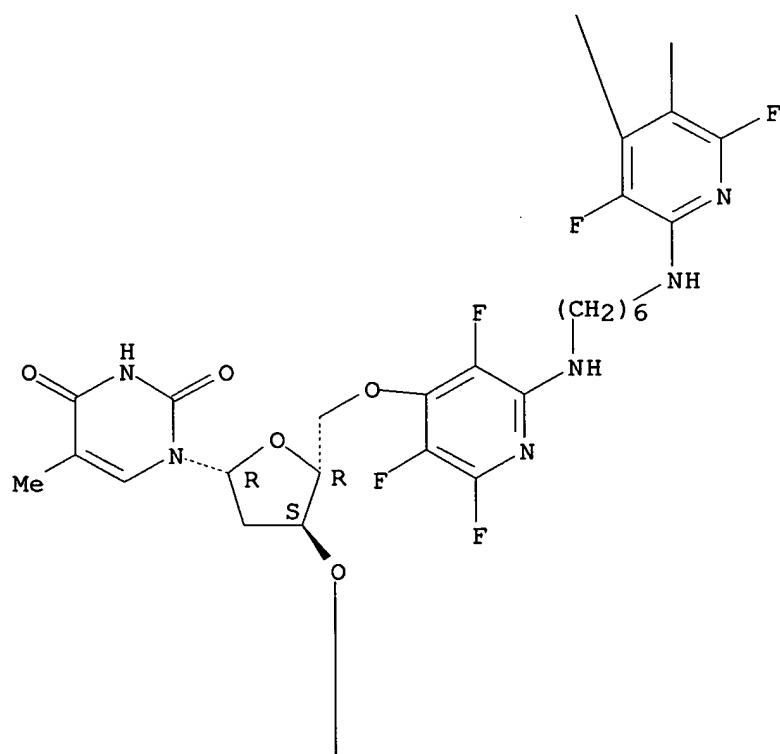
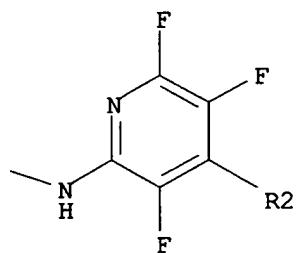
L13 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:642180 CAPLUS  
 DOCUMENT NUMBER: 142:447377  
 TITLE: Polynucleotides and Their Components in the Processes  
 of Aromatic Nucleophilic Substitution: II.1  
 Nucleophilic Modification of 3',5'-Bis-O-  
 ( $\alpha$ , $\beta$ , $\alpha'$ , $\beta'$ -tetrafluoropyrid-  
 $\gamma$ -yl)thymidine  
 AUTHOR(S): Litvak, V. V.; Mainagashev, I. Ya.; Bukhanets, O. G.  
 CORPORATE SOURCE: Novosibirsk Institute of Bioorganic Chemistry,  
 Siberian Division, Russian Academy of Sciences,  
 Novosibirsk, 630090, Russia  
 SOURCE: Russian Journal of Bioorganic Chemistry (Translation  
 of Bioorganicheskaya Khimiya) (2004), 30(4), 337-343  
 CODEN: RJBCET; ISSN: 1068-1620  
 PUBLISHER: MAIK Nauka/Interperiodica Publishing  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 142:447377  
 AB The interaction of 3',5'-bis-O-( $\alpha$ , $\beta$ , $\alpha'$ , $\beta'$ -  
 tetrafluoropyrid- $\gamma$ -yl)thymidine with various nucleophilic reagents  
 was studied to evaluate the possibility of mol. design of new types of  
 nucleic acid analogs using arom nucleophilic substitution reactions. The  
 reactions with morpholine and sodium azide led to the introduction of one  
 and two nucleophilic residues into each of the Poly-fluorinated pyridine  
 rings. The nucleophilic polycondensation with bifunctional reagents  
 ethylenediamine and hexamethylenediamine depended on the nature of  
 nucleophile and reaction conditions and resulted in the formation of  
 supra-mols. containing about five or more than 20 pyrimidine bases.  
 IT 851136-94-2P 851136-95-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of polynucleotides and their components in processes of  
 aromatic  
 nucleophilic substitution of 3',5'-bis-O-( $\alpha$ , $\beta$ , $\alpha'$ , $\beta'$ -  
 .'-tetrafluoropyrid- $\gamma$ -yl)thymidine)  
 RN 851136-94-2 CAPLUS  
 CN Thymidine, 3'-O-dephosphinico-5'-O-(2,3,5,6-tetrafluoro-4-  
 pyridinyl)thymidylyl(3,5,6-trifluoro-4,2-pyridinediyI)imino-1,6-  
 hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyI)-(3'→5')-3'-O-  
 dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyI)imino-1,6-  
 hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyI)-(3'→5')-3'-O-  
 dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyI)imino-1,6-  
 hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyI)-(3'→5')-3'-O-  
 dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyI)imino-1,6-  
 hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyI)-(3'→5')-3'-O-[2-  
 [(6-aminoethyl)amino]-3,5,6-trifluoro-4-pyridinyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

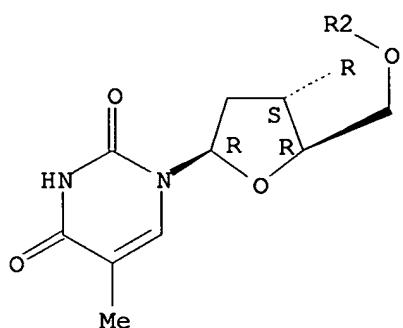
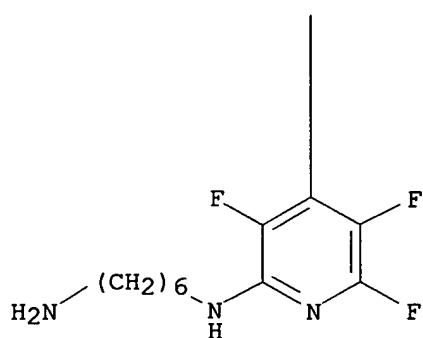


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PAGE 5-A

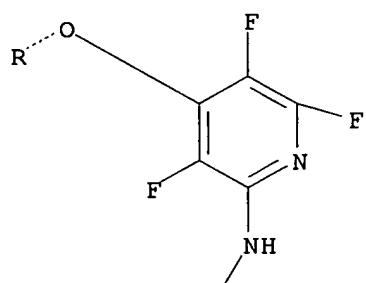
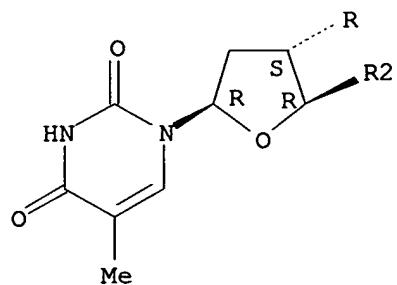


RN 851136-95-3 CAPLUS

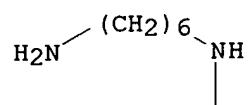
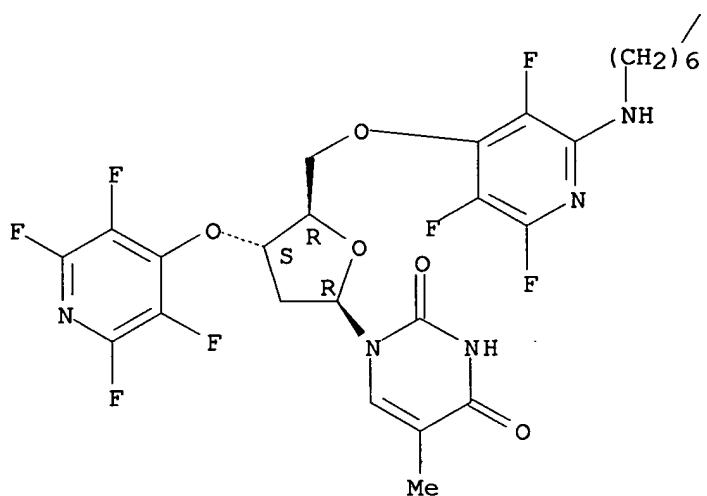
CN Thymidine, 5'-O-[2-[(6-aminohexyl)amino]-3,5,6-trifluoro-4-pyridinyl]-3'-O-dephosphinicothymidyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-(2,3,5,6-tetrafluoro-4-pyridinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

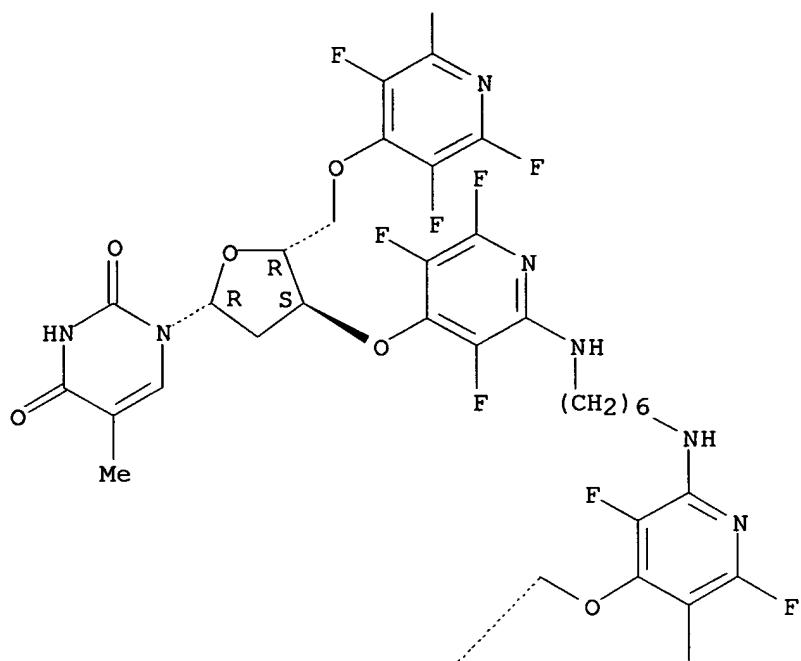
PAGE 1-A



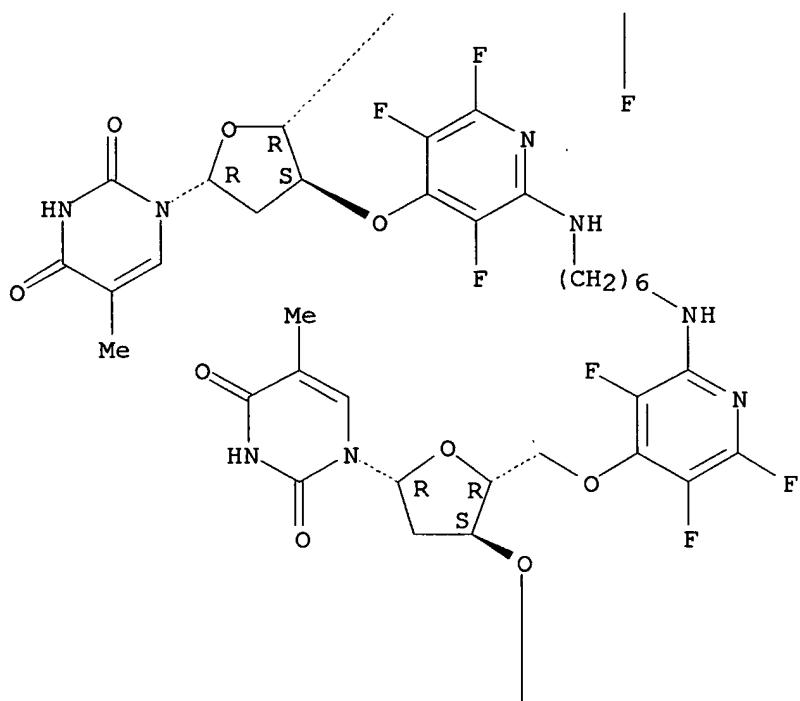
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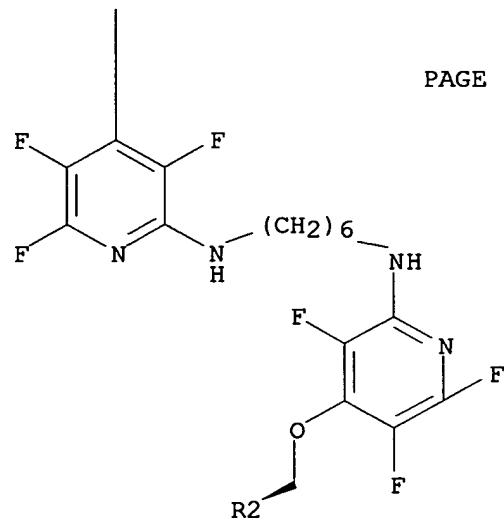
PAGE 3-A



PAGE 4-A



PAGE 5-A



REFERENCE COUNT:

11

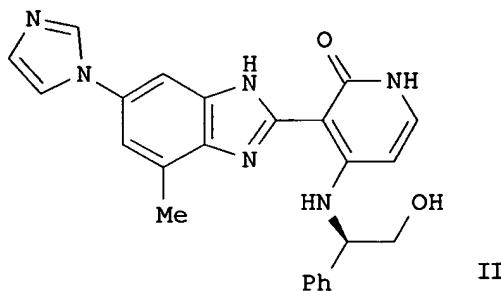
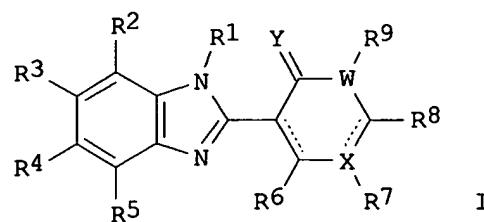
THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,671

E13 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:182584 CAPLUS  
DOCUMENT NUMBER: 140:235710  
TITLE: Preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors  
INVENTOR(S): Wittman, Mark D.; Balasubramanian, Neelakantan; Velaparthi, Upender; Zimmermann, Kurt; Saulnier, Mark G.; Liu, Peiying; Sang, Xiaopeng; Frennesson, David B.; Stoffan, Karen M.; Tarrant, James G.; Marinier, Anne; Roy, Stephan  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 210 pp., Cont.-in-part of U.S. Ser. No. 105,599.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004044203	A1	20040304	US 2002-263448	20021002
WO 2004031401	A2	20040415	WO 2003-US30931	20031001
WO 2004031401	A3	20040729		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1545543	A2	20050629	EP 2003-774510	20031001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2001-279327P	P 20010328
			US 2002-105599	A2 20020325
			US 2002-263448	A 20021002
			WO 2003-US30931	W 20031001

OTHER SOURCE(S): MARPAT 140:235710  
GI



**AB** The title compds. [I; X = N, C, a bond, etc.; Y = O, S; W = N, C, O, S (if W = O or S, then R9 is absent); R1-R9 = H, alkyl, cycloalkyl, etc.] and their pharmaceutically acceptable salts which inhibit tyrosine kinase enzymes thereby making them useful as anti-cancer agents, were prepared Thus, reacting 3-[6-(imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-iodo-1H-pyridin-2-one (preparation given) with (S)-(-)-2-phenylglycinol in the presence of N-methylmorpholine in DMF afforded 52% (S)-II. The compds. I showed kinase activity of <25 $\mu$ M against one or more of the following kinases CDK, EMT, FAK, Her1, Her2, IGF, IR, LCK, MET, PDGF, VEGF. The compds. I are also useful for the treatment of other diseases which can be treated by inhibiting tyrosine kinase enzymes.

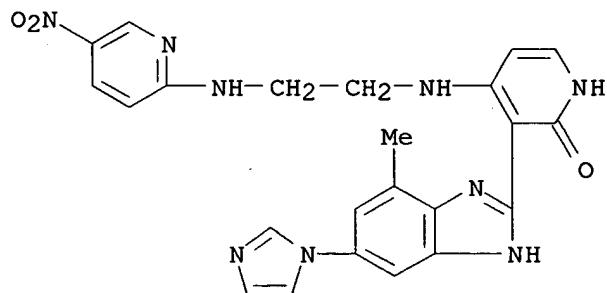
**IT** **468735-06-0P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors)

**RN** 468735-06-0 CAPLUS

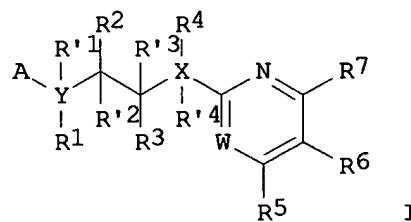
**CN** 2(1H)-Pyridinone, 3-[6-(1H-imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]- (9CI) (CA INDEX NAME)



M13 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
~~ACCESSION NUMBER:~~ 2003:719320 CAPLUS  
~~DOCUMENT NUMBER:~~ 139:240364  
~~TITLE:~~ Glycogen synthase kinase 3 inhibitors for the treatment of ischemia  
~~INVENTOR(S):~~ Harrison, Stephen D.; Wagman, Allan S.; Martin, Kathleen A.  
~~PATENT ASSIGNEE(S):~~ Chiron Corporation, USA  
~~SOURCE:~~ PCT Int. Appl., 63 pp.  
~~CODEN: PIXXD2~~  
~~DOCUMENT TYPE:~~ Patent  
~~LANGUAGE:~~ English  
~~FAMILY ACC. NUM. COUNT:~~ 1  
~~PATENT INFORMATION:~~

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074072	A1	20030912	WO 2003-US6742	20030303
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003220026	A1	20030916	AU 2003-220026	20030303
EP 1490093	A1	20041229	EP 2003-716314	20030303
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1649616	A	20050803	CN 2003-809261	20030303
JP 2005525362	T2	20050825	JP 2003-572588	20030303
US 2005203059	A1	20050915	US 2005-506570	20050429
PRIORITY APPLN. INFO.:			US 2002-361417P	P 20020301
			WO 2003-US6742	W 20030303

OTHER SOURCE(S): MARPAT 139:240364  
GI



AB Methods and compns. are provided for the prophylaxis or inhibition of cerebral ischemic injury by administration of an inhibitor of glycogen synthase kinase 3 (GSK3) activity, either alone or in combination with at least one addnl. agent for the treatment of ischemic stroke. Screening

data are given for GSK3 inhibitor EC50 values for a number of compds. such as I.

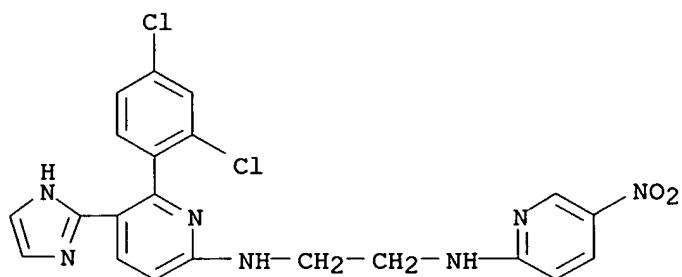
IT 252936-05-3 252942-40-8 596112-65-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(glycogen synthase kinase 3 inhibitors for the treatment of ischemia)

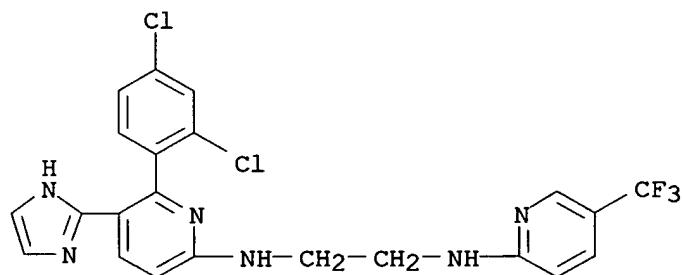
RN 252936-05-3 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



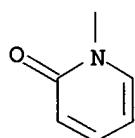
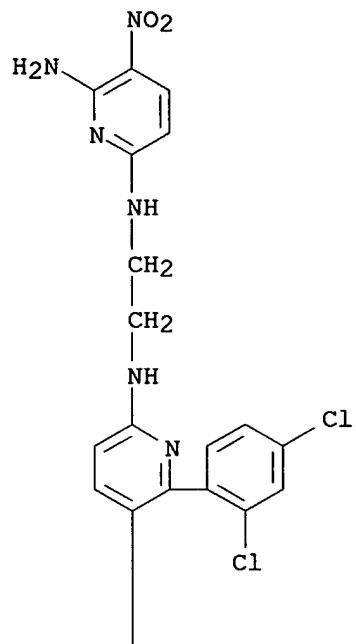
RN 252942-40-8 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 596112-65-1 CAPLUS

CN [1(2H),3'-Bipyridin]-2-one, 6'-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2'-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



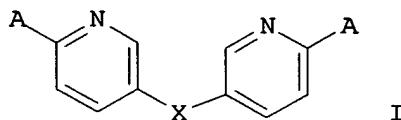
**REFERENCE COUNT:**

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THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:22855 CAPLUS  
 DOCUMENT NUMBER: 138:89831  
 TITLE: Preparation of bis(2-aryl-5-pyridyl)diamine derivatives as inhibitors of IgE antibody production  
 INVENTOR(S): Ishiwata, Hiroyuki; Sato, Seiichi; Kabeya, Mototsugu; Oda, Soichi; Suda, Makoto; Shibasaki, Manabu  
 PATENT ASSIGNEE(S): Kowa Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 95 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003002538	A1	20030109	WO 2002-JP6493	20020627
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003022886	A1	20030130	US 2001-893680	20010629
US 6890940	B2	20050510		
EP 1403251	A1	20040331	EP 2002-738821	20020627
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2001-893680	A 20010629
			WO 2002-JP6493	W 20020627
OTHER SOURCE(S):	MARPAT	138:89831		
GI				



- AB The title compds. I [A represents an optionally substituted aromatic hydrocarbon group and X represents a group such as R2N(CH2)pZ(CH2)qNR3, etc.; R2 and R3 each represents hydrogen or lower alkyl; Z represents a single bond, substituted methylene, substituted imino, oxygen, or cycloalkylene; p and q each is a number of 0 to 6] are prepared I are useful in the treatment of allergic immune diseases. N,N'-bis[2-(4-hydroxy-3,5-dimethoxyphenyl)-5-pyridyl]-N,N'-dimethylethylenediamine 2MeSO3H salt in vitro showed IC50 of 0.04 μM in a test for inhibiting the production of IgE antibody in mouse spleen cells.
- IT 483987-82-2P 483987-83-3P 483987-84-4P  
 483987-85-5P 483987-86-6P 483987-87-7P  
 483987-88-8P 483987-89-9P 483987-90-2P  
 483987-91-3P 483987-92-4P 483987-93-5P

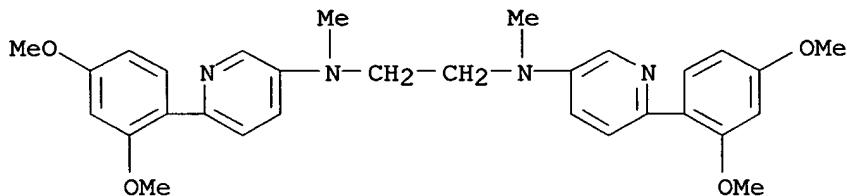
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 483988-70-1P 483988-71-2P 483988-72-3P  
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 483988-79-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of bis(2-aryl-5-pyridyl)diamine derivs. as inhibitors of IgE antibody production)

RN 483987-82-2 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(2,4-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



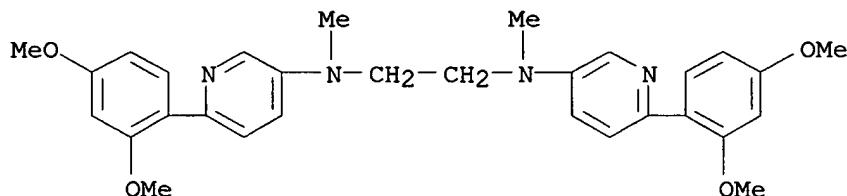
RN 483987-83-3 CAPLUS

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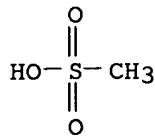
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CMF C30 H34 N4 O4

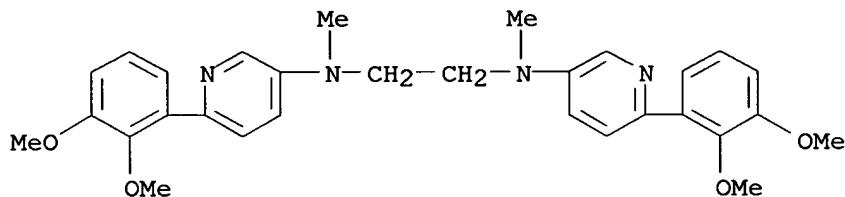


CM 2

CRN 75-75-2  
CMF C H4 O3 S



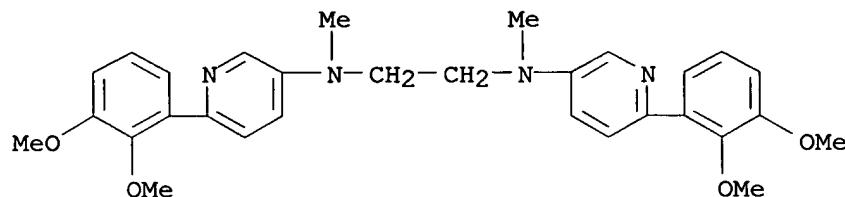
RN 483987-84-4 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-(2,3-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-85-5 CAPLUS  
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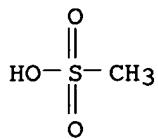
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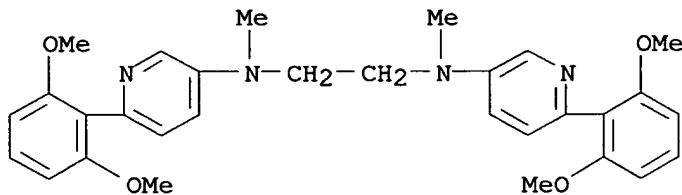
CM 2

CRN 75-75-2  
CMF C H4 O3 S



RN 483987-86-6 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(2,6-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



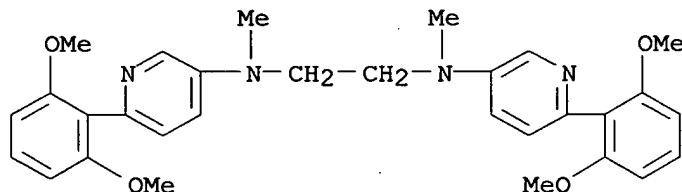
RN 483987-87-7 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(2,6-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

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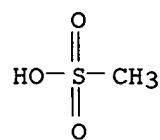
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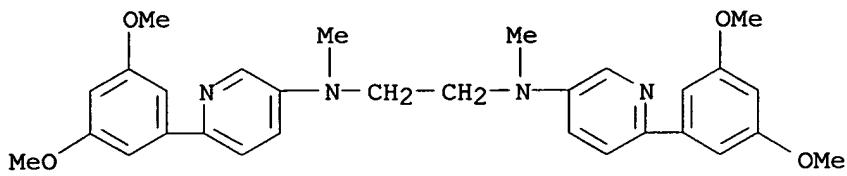
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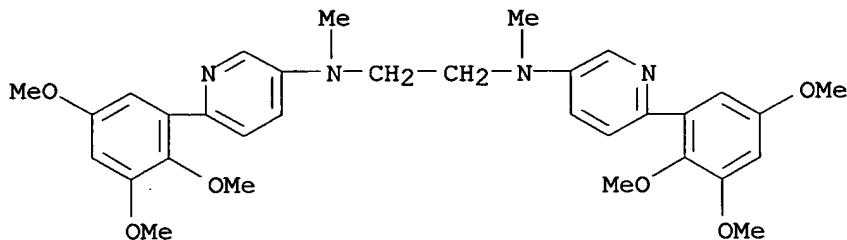
RN 483987-88-8 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



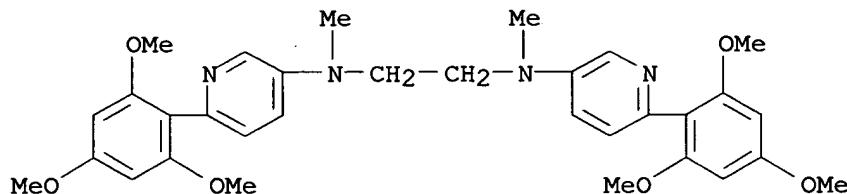
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CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(2,3,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483987-90-2 CAPLUS

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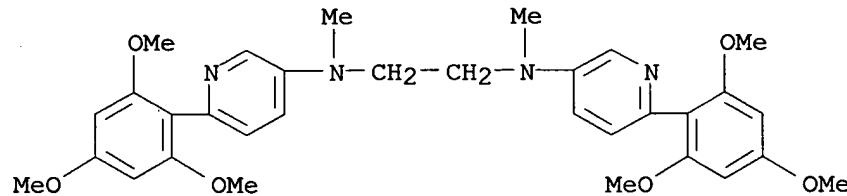
RN 483987-91-3 CAPLUS

CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(2,4,6-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

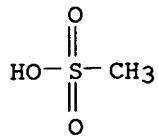
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CMF C32 H38 N4 06

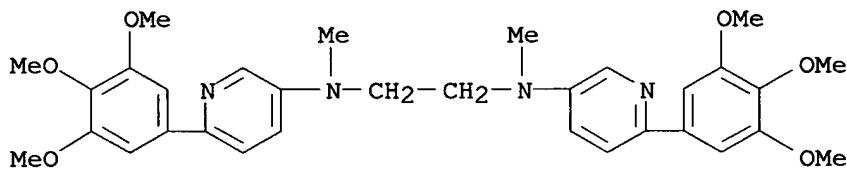


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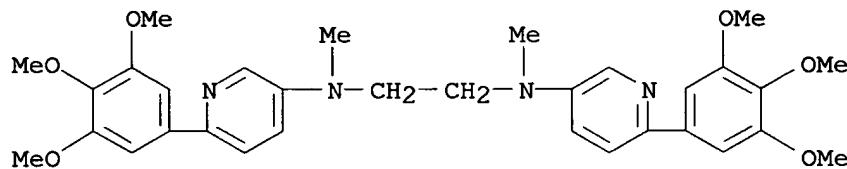
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CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483987-93-5 CAPLUS  
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

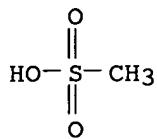
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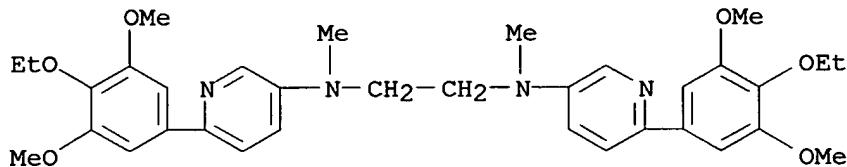


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CMF C H4 O3 S



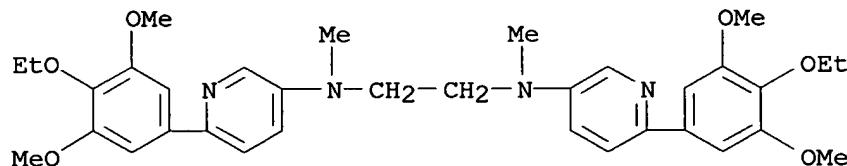
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CN 1,2-Ethanediamine, N,N'-bis[6-(4-ethoxy-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-95-7 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-(4-ethoxy-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

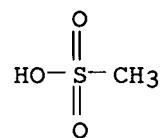
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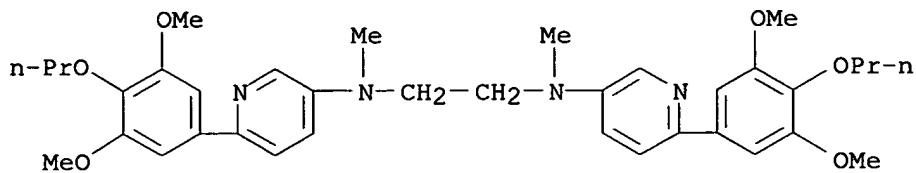


CM 2

CRN 75-75-2  
CMF C H4 O3 S



RN 483987-96-8 CAPLUS  
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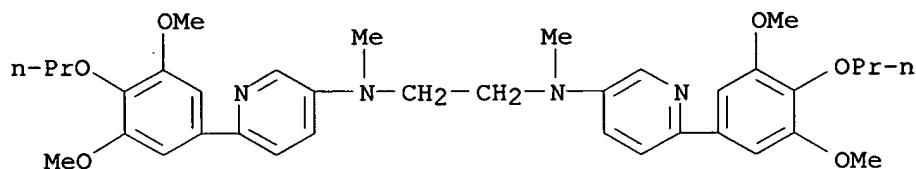
RN 483987-97-9 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-propoxypyhenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

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CRN 483987-96-8

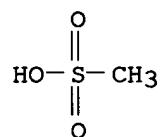
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CM 2

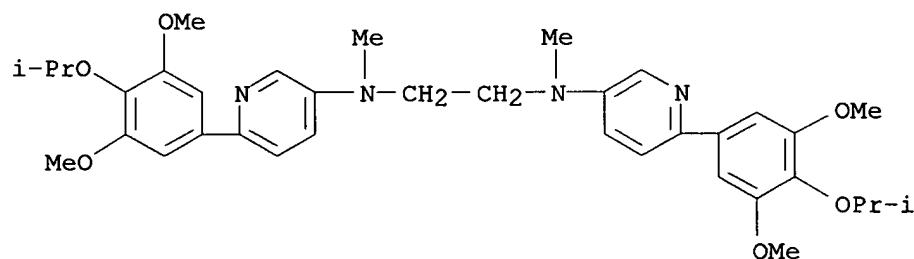
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CMF C H4 O3 S



RN 483987-98-0 CAPLUS

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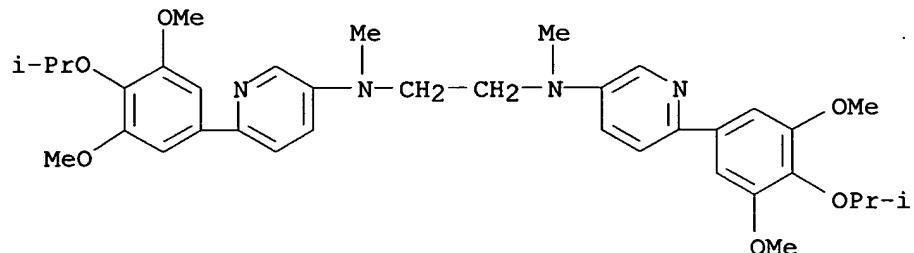
RN 483987-99-1 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-

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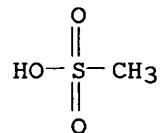
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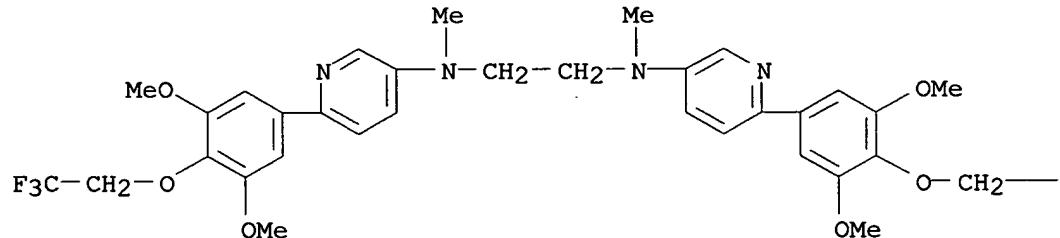
CM 2

CRN 75-75-2  
CMF C H4 O3 S



RN 483988-00-7 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(2,2,2-trifluoroethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

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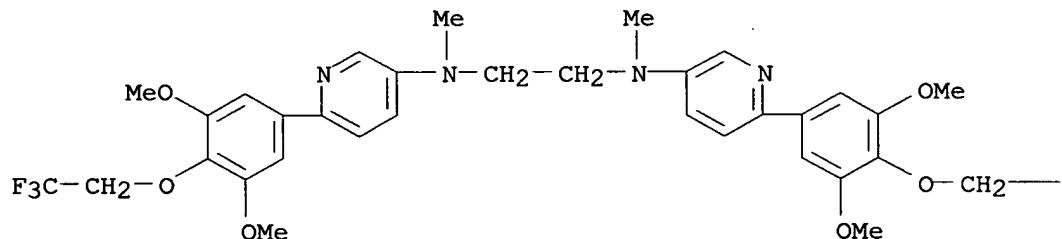
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CRN 483988-00-7

CMF C34 H36 F6 N4 O6

PAGE 1-A



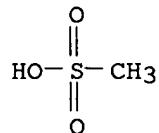
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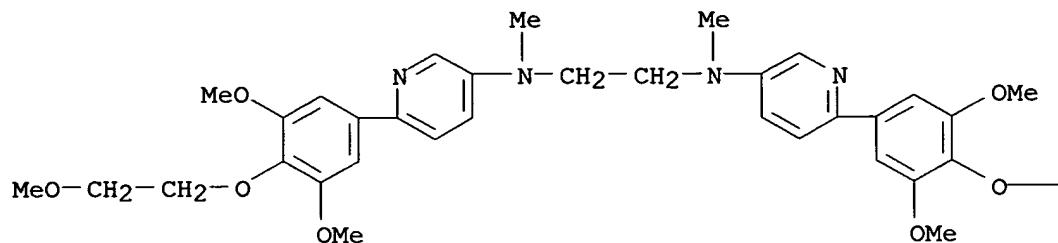
CRN 75-75-2

CMF C H4 O3 S



RN 483988-02-9 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(2-methoxyethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

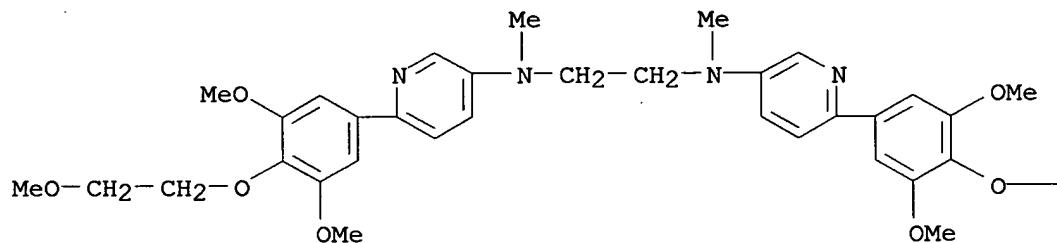
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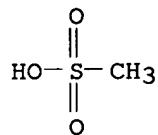
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PAGE 1-B

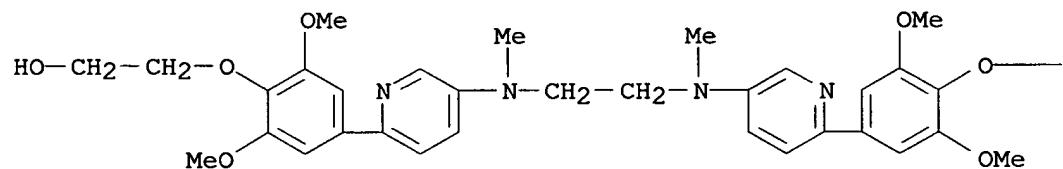
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CM 2

CRN 75-75-2  
CMF C H<sub>4</sub> O<sub>3</sub> S

RN 483988-04-1 CAPLUS  
 CN Ethanol, 2,2'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl(2,6-dimethoxy-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



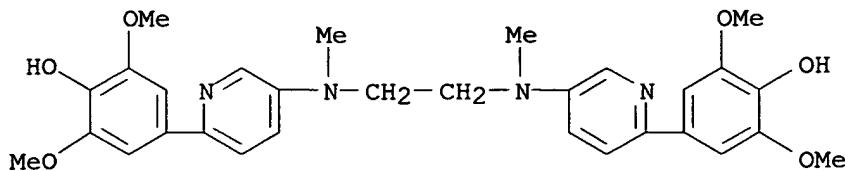
PAGE 1-B

— CH<sub>2</sub>— CH<sub>2</sub>— OH

RN 483988-06-3 CAPLUS  
 CN Phenol, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, dimethanesulfonate (salt) (9CI) (CA INDEX NAME)]

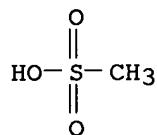
CM 1

CRN 483988-05-2  
CMF C<sub>30</sub> H<sub>34</sub> N<sub>4</sub> O<sub>6</sub>



CM 2

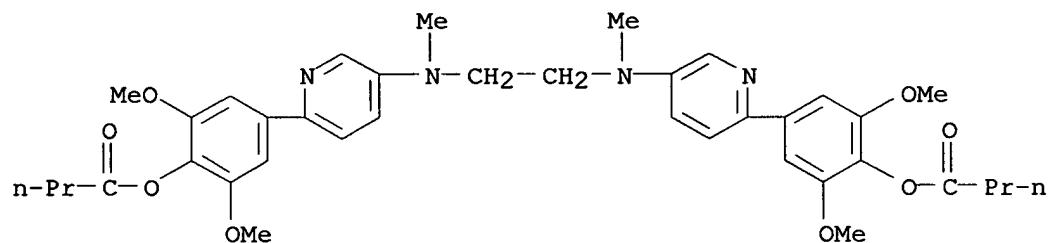
CRN 75-75-2  
CMF C H4 O3 S



RN 483988-08-5 CAPLUS  
CN Butanoic acid, 1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl(2,6-dimethoxy-4,1-phenylene)] ester, dimethanesulfonate (9CI) (CA INDEX NAME)

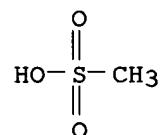
CM 1

CRN 483988-07-4  
CMF C38 H46 N4 O8



CM 2

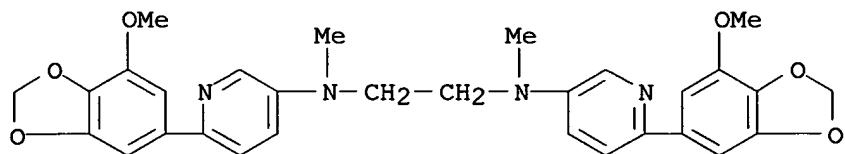
CRN 75-75-2  
CMF C H4 O3 S



10/690,671

RN 483988-09-6 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



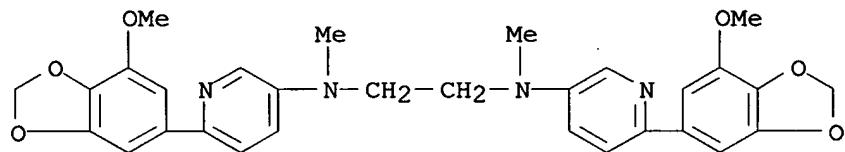
RN 483988-10-9 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-09-6

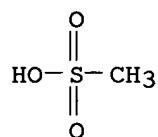
CMF C30 H30 N4 O6



CM 2

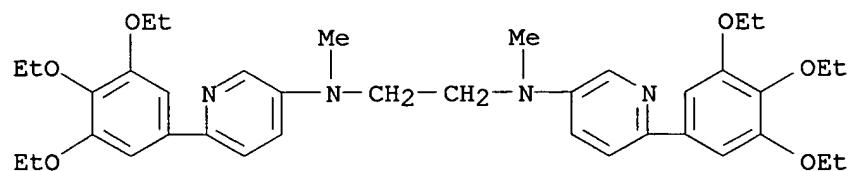
CRN 75-75-2

CMF C H4 O3 S



RN 483988-11-0 CAPLUS

CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-triethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



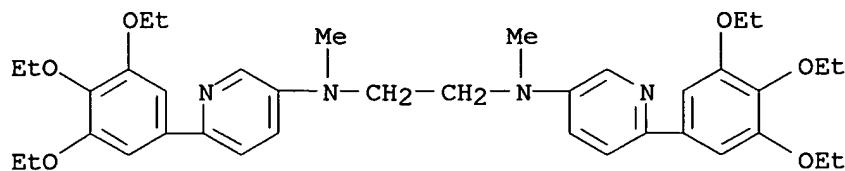
RN 483988-12-1 CAPLUS

CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-triethoxyphenyl)-3-

pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

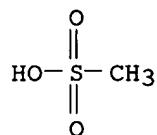
CM 1

CRN 483988-11-0  
CMF C38 H50 N4 O6



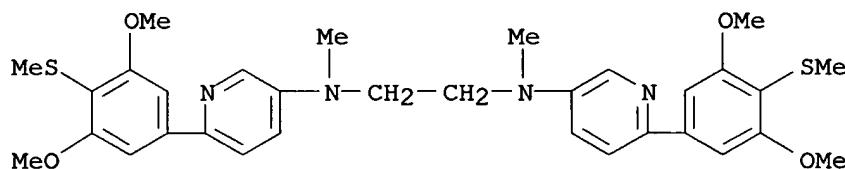
CM 2

CRN 75-75-2  
CMF C H4 O3 S



RN 483988-13-2 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(methylthio)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

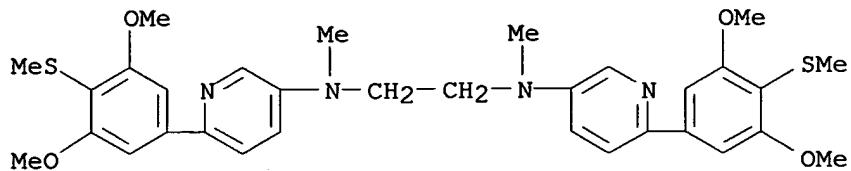


RN 483988-14-3 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(methylthio)phenyl]-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

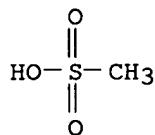
CRN 483988-13-2  
CMF C32 H38 N4 O4 S2



CM 2

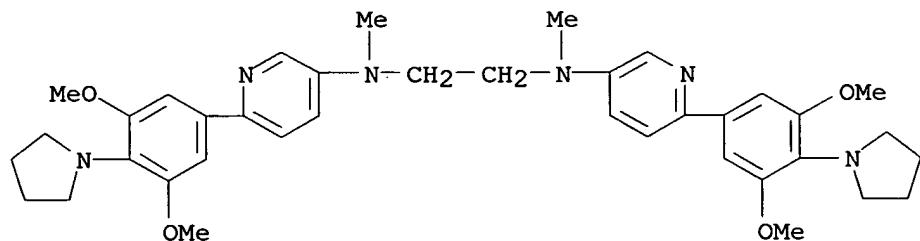
CRN 75-75-2

CMF C H4 O3 S



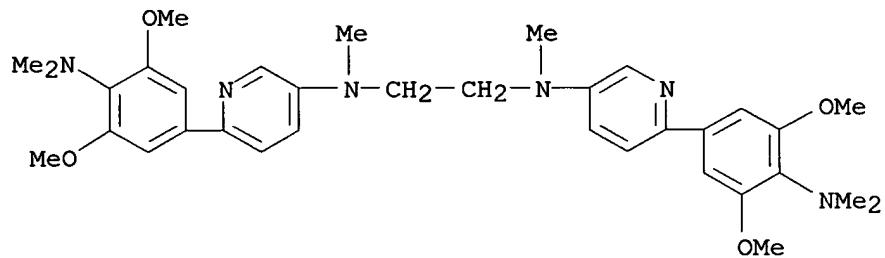
RN 483988-15-4 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-pyrrolidinyl)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



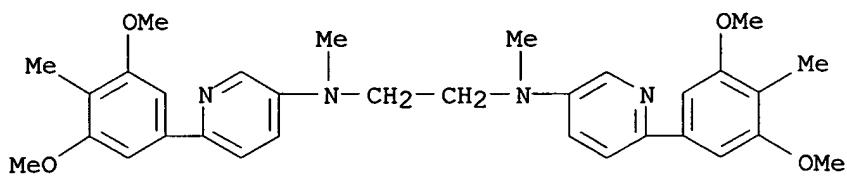
RN 483988-16-5 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[4-(dimethylamino)-3,5-dimethoxyphenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-17-6 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-methylphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



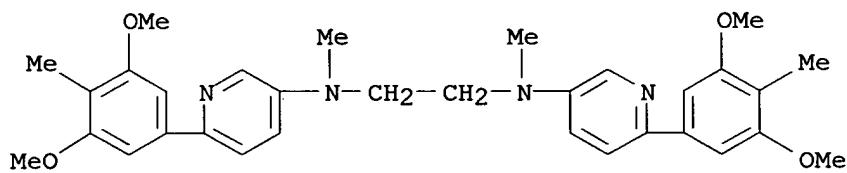
RN 483988-18-7 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-methylphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-17-6

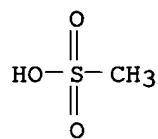
CMF C32 H38 N4 O4



CM 2

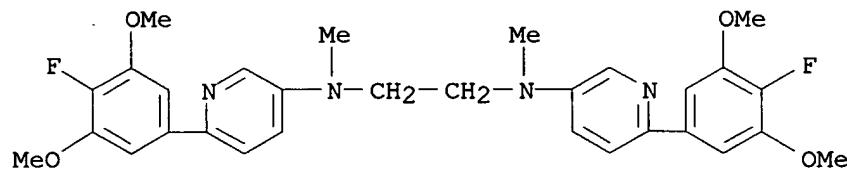
CRN 75-75-2

CMF C H4 O3 S



RN 483988-19-8 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(4-fluoro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

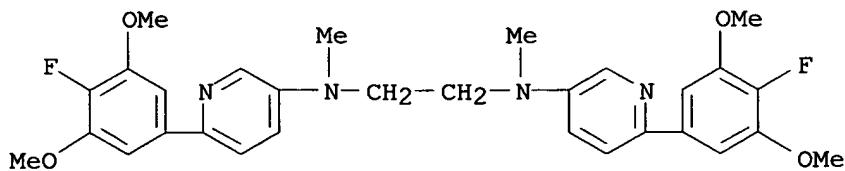


RN 483988-20-1 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(4-fluoro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

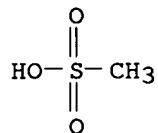
CM 1

CRN 483988-19-8  
CMF C30 H32 F2 N4 O4

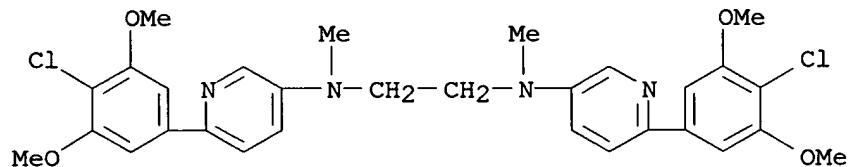


CM 2

CRN 75-75-2  
CMF C H4 O3 S



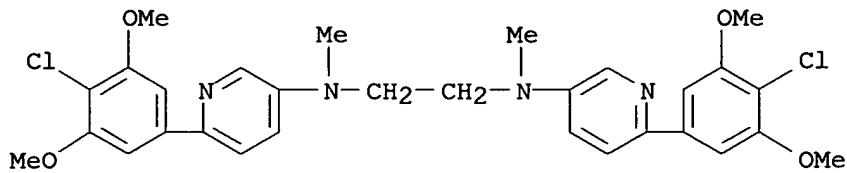
RN 483988-21-2 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-(4-chloro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-22-3 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-(4-chloro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

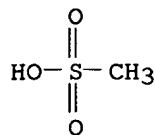
CRN 483988-21-2  
CMF C30 H32 Cl2 N4 O4



CM 2

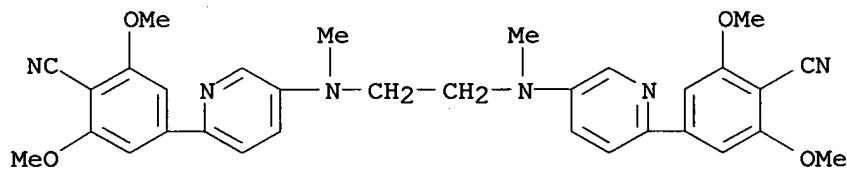
CRN 75-75-2

CMF C H4 O3 S



RN 483988-23-4 CAPLUS

CN Benzonitrile, 4,4'-[1,2-ethanediylbis[(methylinimo)-5,2-pyridinediyl]]bis[2,6-dimethoxy- (9CI) (CA INDEX NAME)



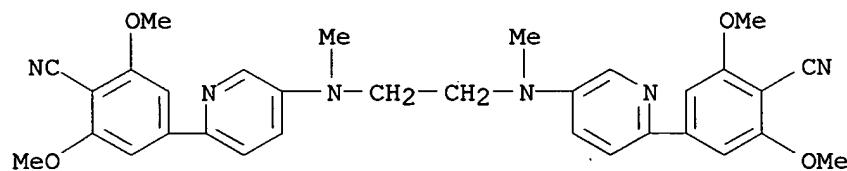
RN 483988-24-5 CAPLUS

CN Benzonitrile, 4,4'-[1,2-ethanediylbis[(methylinimo)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-23-4

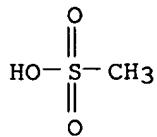
CMF C32 H32 N6 O4



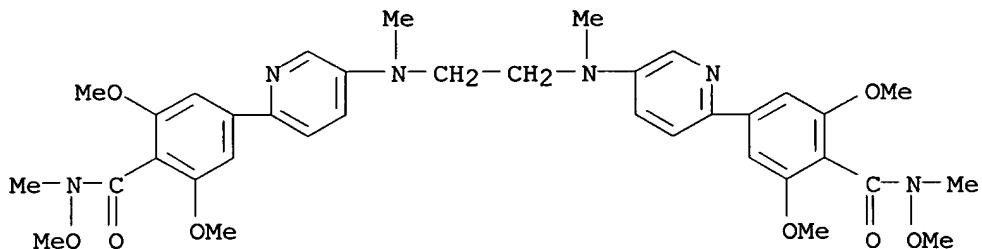
CM 2

10/690, 671

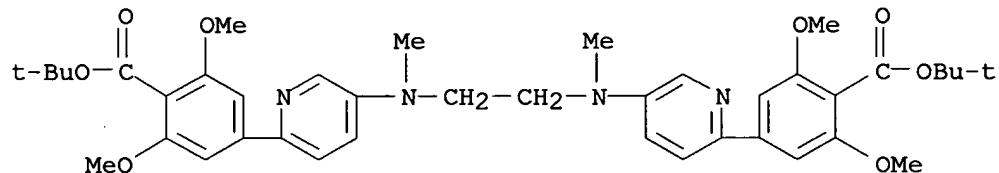
CRN 75-75-2  
CMF C H4 O3 S



RN 483988-25-6 CAPLUS  
CN Benzamide, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[N,2,6-trimethoxy-N-methyl- (9CI) (CA INDEX NAME)



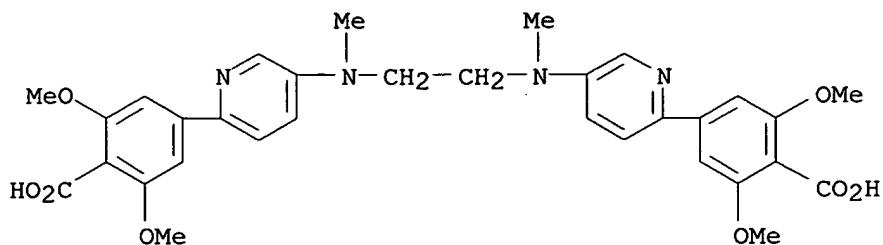
RN 483988-26-7 CAPLUS  
CN Benzoic acid, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 483988-28-9 CAPLUS  
CN Benzoic acid, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

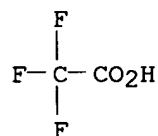
CM 1

CRN 483988-27-8  
CMF C32 H34 N4 O8

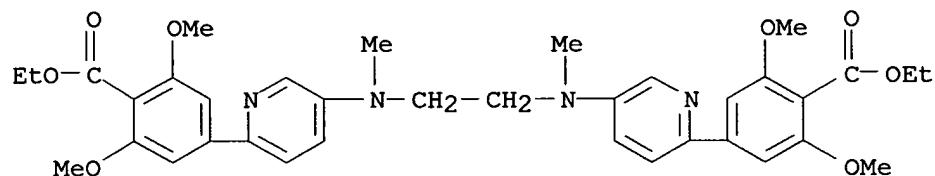


CM 2

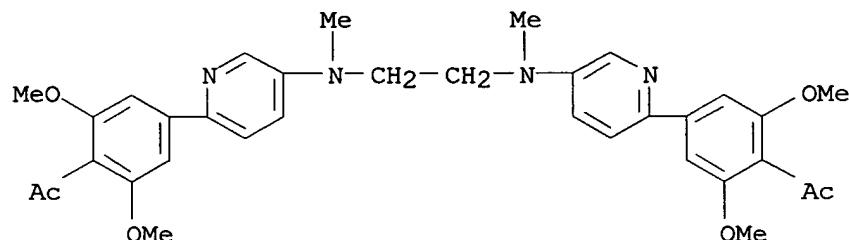
CRN 76-05-1  
CMF C2 H F3 O2



RN 483988-29-0 CAPLUS  
CN Benzoic acid, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, diethyl ester (9CI) (CA INDEX NAME)



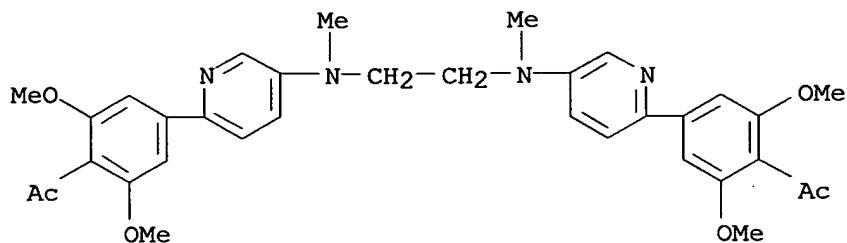
RN 483988-30-3 CAPLUS  
CN Ethanone, 1,1'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl](2,6-dimethoxy-4,1-phenylene)]bis- (9CI) (CA INDEX NAME)



RN 483988-31-4 CAPLUS  
CN Ethanone, 1,1'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl](2,6-dimethoxy-4,1-phenylene)]bis-, dimethanesulfonate (9CI) (CA INDEX NAME)

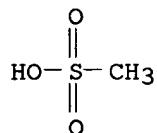
CM 1

CRN 483988-30-3  
CMF C34 H38 N4 O6

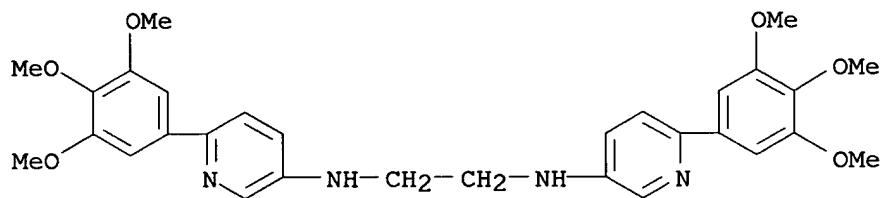


CM 2

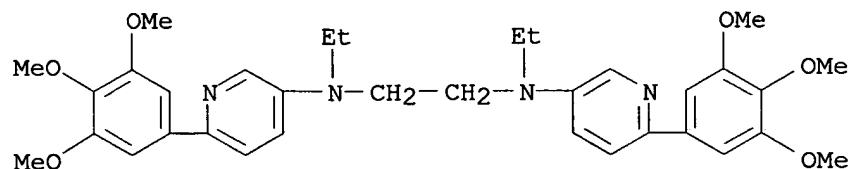
CRN 75-75-2  
CMF C H4 O3 S



RN 483988-38-1 CAPLUS  
CN 1,2-Ethanediamine, N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI)  
(CA INDEX NAME)



RN 483988-41-6 CAPLUS  
CN 1,2-Ethanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



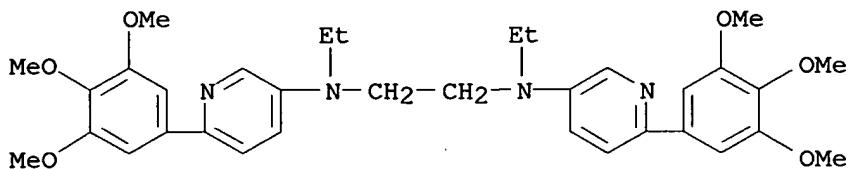
RN 483988-42-7 CAPLUS

CN 1,2-Ethanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-41-6

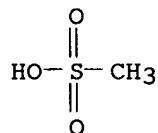
CMF C34 H42 N4 O6



CM 2

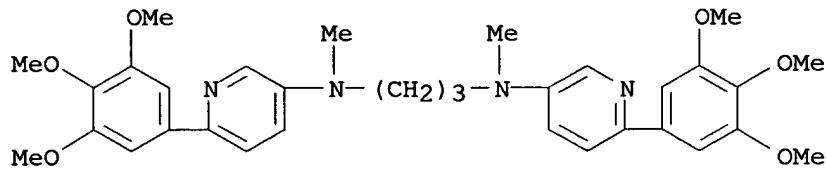
CRN 75-75-2

CMF C H4 O3 S



RN 483988-43-8 CAPLUS

CN 1,3-Propanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



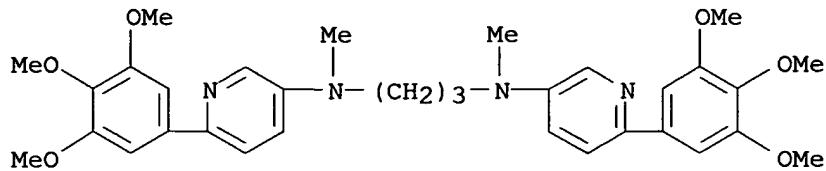
RN 483988-44-9 CAPLUS

CN 1,3-Propanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-43-8

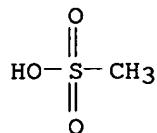
CMF C33 H40 N4 O6



CM 2

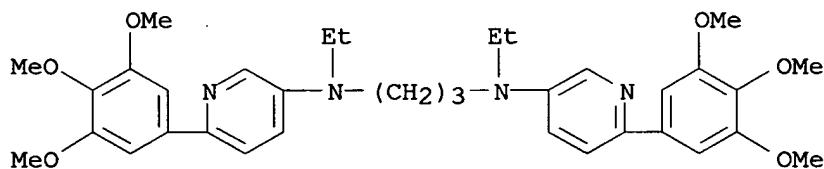
CRN 75-75-2

CMF C H4 O3 S



RN 483988-45-0 CAPLUS

CN 1,3-Propanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



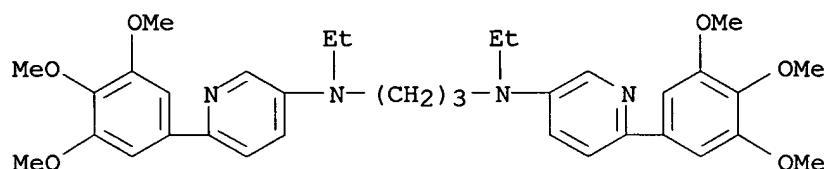
RN 483988-46-1 CAPLUS

CN 1,3-Propanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-45-0

CMF C35 H44 N4 O6

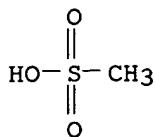


CM 2

CRN 75-75-2

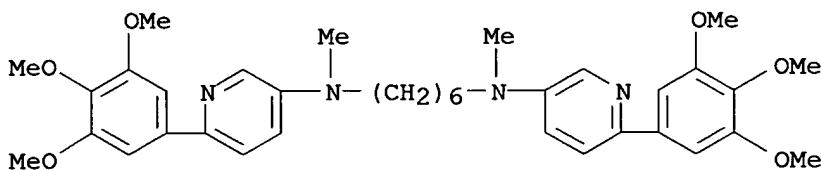
10/690,671

CMF C H4 O3 S



RN 483988-64-3 CAPLUS

CN 1,6-Hexanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



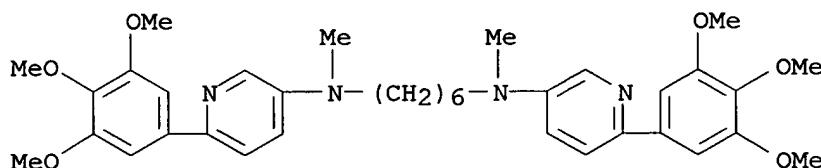
RN 483988-65-4 CAPLUS

CN 1,6-Hexanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-64-3

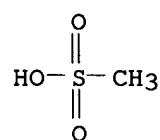
CMF C36 H46 N4 O6



CM 2

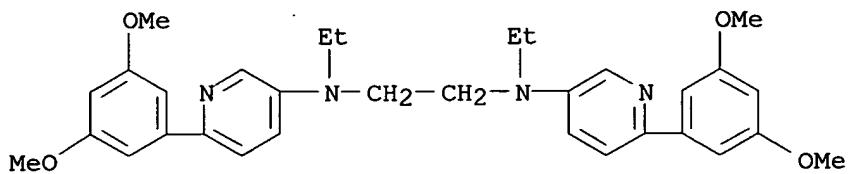
CRN 75-75-2

CMF C H4 O3 S



RN 483988-66-5 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-diethyl- (9CI) (CA INDEX NAME)



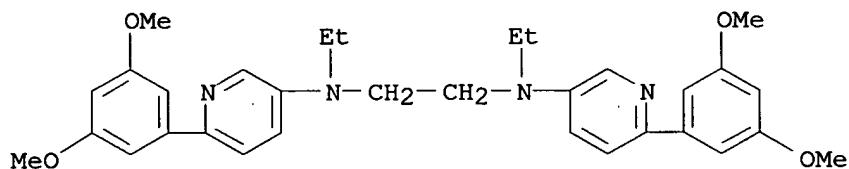
RN 483988-67-6 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-diethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-66-5

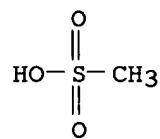
CMF C32 H38 N4 O4



CM 2

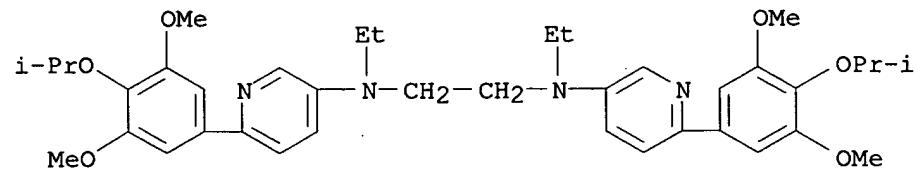
CRN 75-75-2

CMF C H4 O3 S



RN 483988-68-7 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl- (9CI) (CA INDEX NAME)

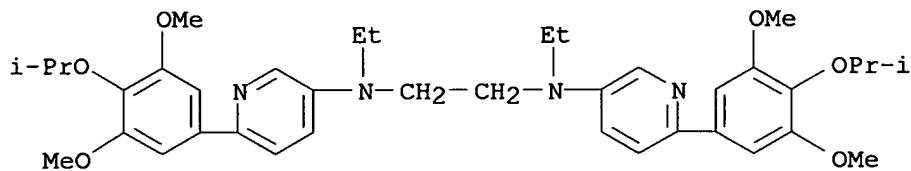


RN 483988-69-8 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

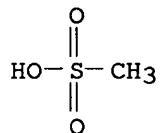
CM 1

CRN 483988-68-7  
CMF C38 H50 N4 O6

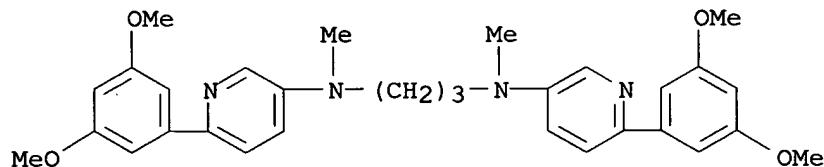


CM 2

CRN 75-75-2  
CMF C H4 O3 S



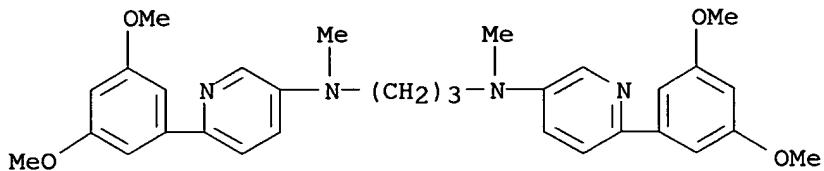
RN 483988-70-1 CAPLUS  
CN 1,3-Propanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-71-2 CAPLUS  
CN 1,3-Propanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

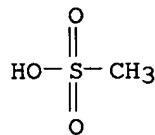
CRN 483988-70-1  
CMF C31 H36 N4 O4



CM 2

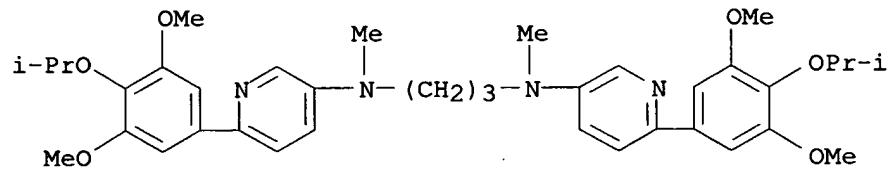
CRN 75-75-2

CMF C H4 O3 S



RN 483988-72-3 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



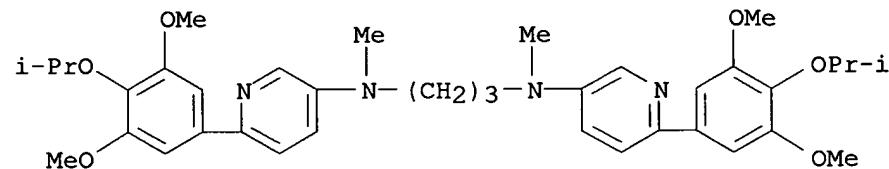
RN 483988-73-4 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-72-3

CMF C37 H48 N4 O6

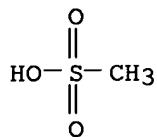


CM 2

CRN 75-75-2

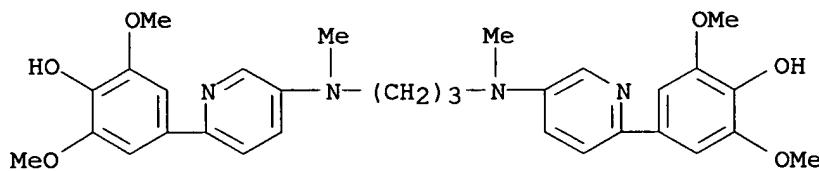
10/690, 671

CMF C H4 O3 S



RN 483988-74-5 CAPLUS

CN Phenol, 4,4'-[1,3-propanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy- (9CI) (CA INDEX NAME)



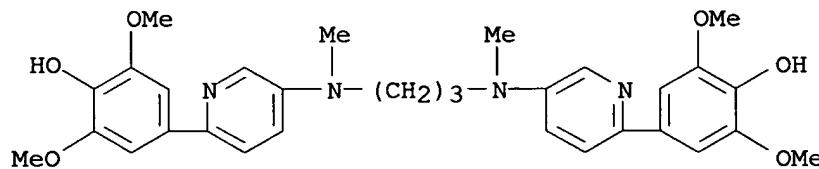
RN 483988-75-6 CAPLUS

CN Phenol, 4,4'-[1,3-propanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, dimethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 483988-74-5

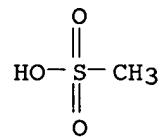
CMF C31 H36 N4 O6



CM 2

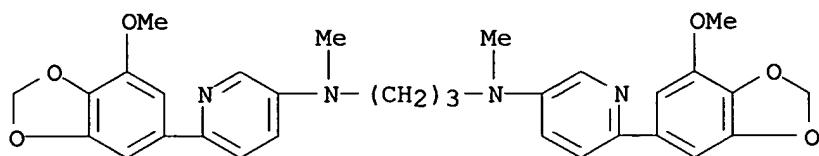
CRN 75-75-2

CMF C H4 O3 S



RN 483988-76-7 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



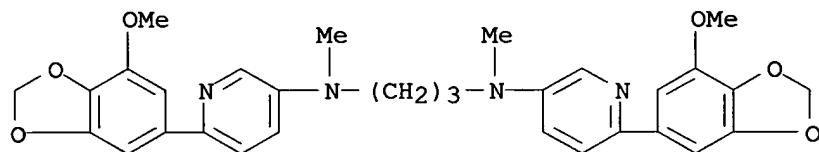
RN 483988-77-8 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-76-7

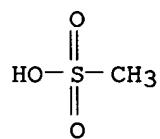
CMF C31 H32 N4 O6



CM 2

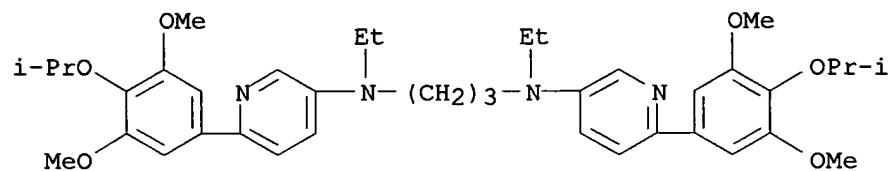
CRN 75-75-2

CMF C H4 O3 S



RN 483988-78-9 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl- (9CI) (CA INDEX NAME)

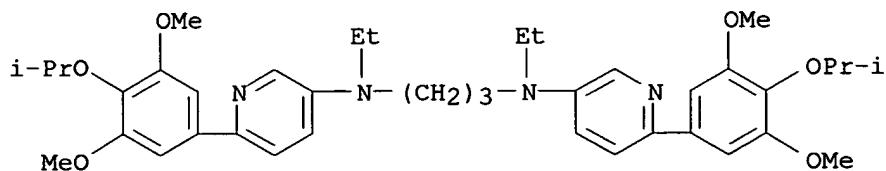


RN 483988-79-0 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

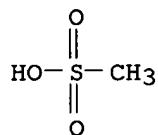
CM 1

CRN 483988-78-9  
 CMF C39 H52 N4 O6



CM 2

CRN 75-75-2  
 CMF C H4 O3 S



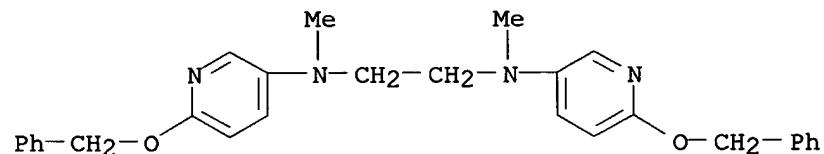
IT 483988-85-8P 483989-15-7P 483989-16-8P

483989-22-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of bis(2-aryl-5-pyridyl)diamine derivs. as inhibitors of IgE antibody production)

RN 483988-85-8 CAPLUS

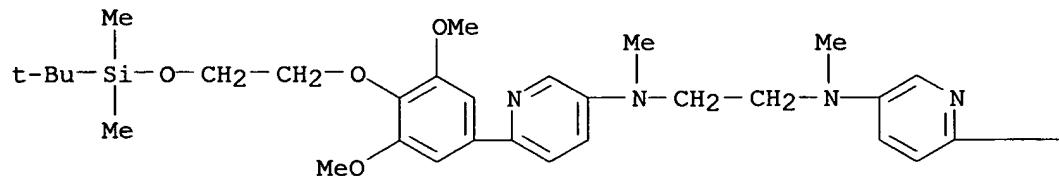
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(phenylmethoxy)-3-pyridinyl]-(9CI) (CA INDEX NAME)



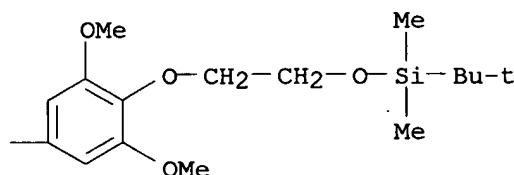
RN 483989-15-7 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[4-[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethoxy]-3,5-dimethoxyphenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

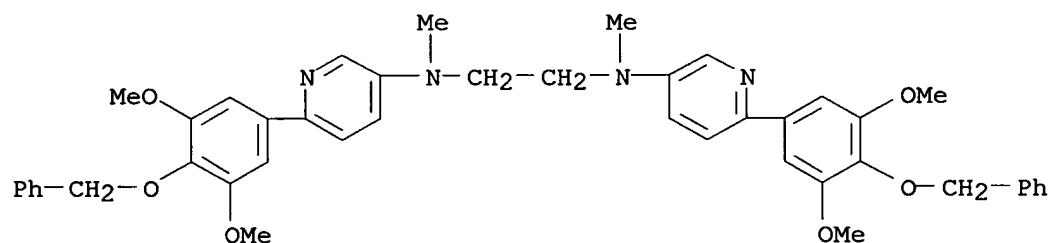


PAGE 1-B



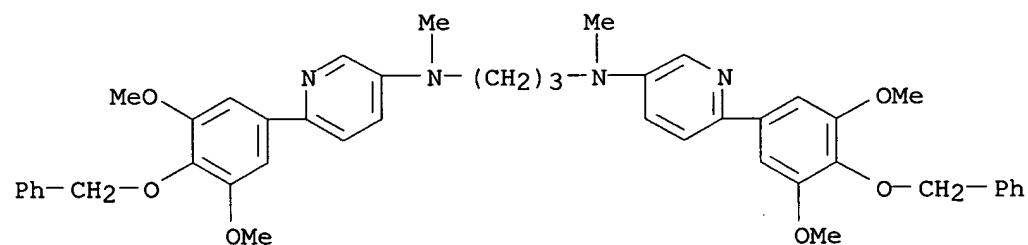
RN 483989-16-8 CAPLUS

CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(phenylmethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483989-22-6 CAPLUS

CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(phenylmethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

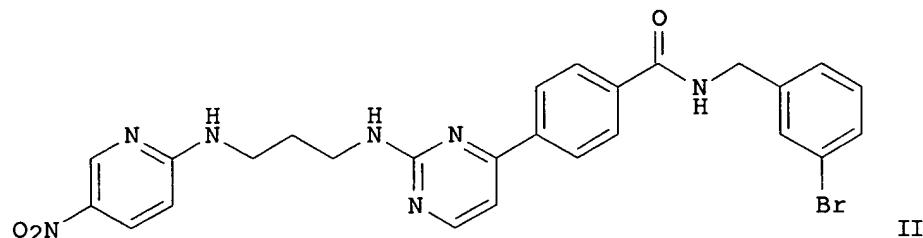
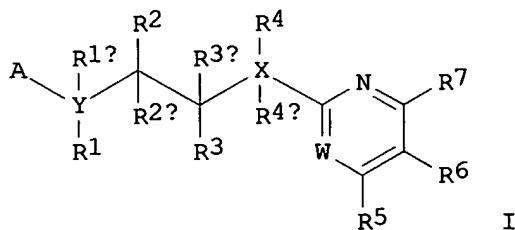
8

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:814853 CAPLUS  
 DOCUMENT NUMBER: 137:325431  
 TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors  
 INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Johnson, Kirk; Pfister, Keith B.; Ramurthy, Savithri; Seely, Lynn; Wagman, Allan S.; Desai, Manjo; Levine, Barry H.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 134 pp., Cont.-in-part of U.S. 6,417,185.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002156087	A1	20021024	US 2001-949035	20010906
US 6417185	B1	20020709	US 1999-336038	19990618
PRIORITY APPLN. INFO.:			US 1999-336038	A2 19990618
			US 2000-230480P	P 20000906
			US 1998-89978P	P 19980619

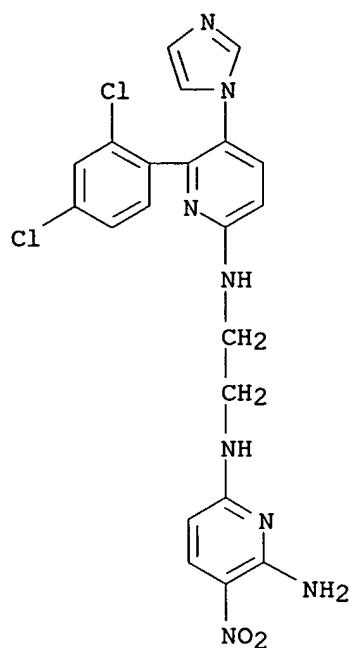
OTHER SOURCE(S): MARPAT 137:325431  
 GI



AB Title compds. I [wherein W = (un)substituted C or N; X and Y = independently N, O, or (un)substituted C; A = (un)substituted (hetero)aryl; R1, R1a, R2, R2a, R3, R3a, R4, and R4a = independently H, OH, alkoxy, acyl, (hetero)aryl, or (un)substituted (cyclo)alkyl, amino(alkyl), etc. ; R5 and R7 = independently H, halo, alkoxy, guanidinyl, (bi)aryl, hetero(bi)aryl, heterocycloalkyl, arylsulfonamido, or (un)substituted (cyclo)alkyl, amino(alkoxy), or amidino; R6 = H, halo,

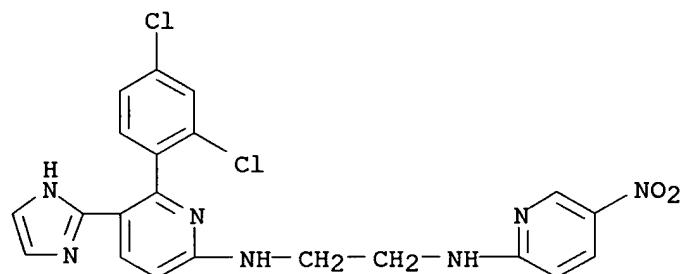
carboxyl, NO<sub>2</sub>, (cyclo)amido, (cyclo)amidino, (cyclo)imido, CN, alkoxy, acyl(oxy), guanidinyl, (hetero)aryl, heterocyclo(alkyl), arylsulfonyl, arylsulfonamido, or (un)substituted alkyl, amino, etc.] were prepared as glycogen synthase kinase 3 (GSK3) inhibitors. For example, 2-chloro-5-nitropyridine was aminated by H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine. The latter was cyclocondensed with resin-bound 4-(MeCO)C<sub>6</sub>H<sub>4</sub>CONHCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Br-3 and Cs<sub>2</sub>CO<sub>3</sub> to afford, after resin cleavage, the pyrimidinamine II. The most preferred compds. of the invention exhibited inhibitory activity against human GSK3β in a cell free assay with IC<sub>50</sub> values of < 1 μM. Thus, I and compns. containing I may be employed alone or in combination with other pharmacol. active agents in the treatment of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, or cancer (no data).

- IT 252917-05-8P, 2,6-Pyridinediamine, N6-[2-[(6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl)amino]ethyl]-3-nitro-  
 252936-05-3P, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- 252938-13-9P  
 , 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)-  
 252942-25-9P, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)-  
 252942-26-0P, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)-  
 252942-30-6P, Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-pyridinyl]- 252942-34-0P,  
 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- 252942-35-1P,  
 3-Pyridinecarbonitrile, 6-[[2-[(6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl)amino]ethyl]amino]- 252942-37-3P,  
 2,6-Pyridinediamine, N6-[2-[(6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl)amino]ethyl]-3-nitro- 252942-38-4P,  
 3-Pyridinecarbonitrile, 6-[[2-[(6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl)amino]ethyl]amino]- 252942-39-5P,  
 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-(6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl)- 252942-40-8P,  
 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- 252942-41-9P,  
 3-Pyridinecarbonitrile, 6-[[2-[(6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl)amino]ethyl]amino]-  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)
- RN 252917-05-8 CAPLUS  
 CN 2,6-Pyridinediamine, N6-[2-[(6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl)amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



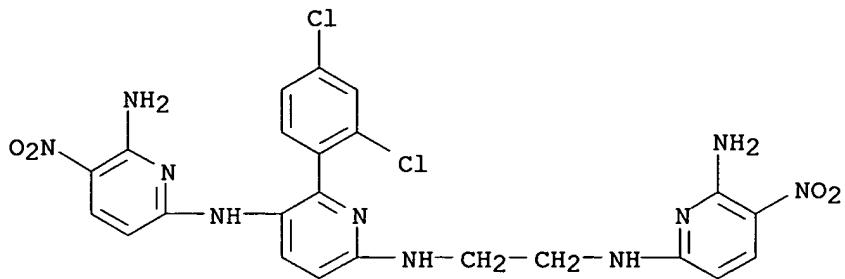
RN 252936-05-3 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



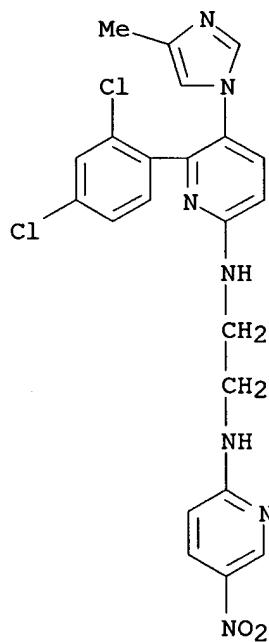
RN 252938-13-9 CAPLUS

CN 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



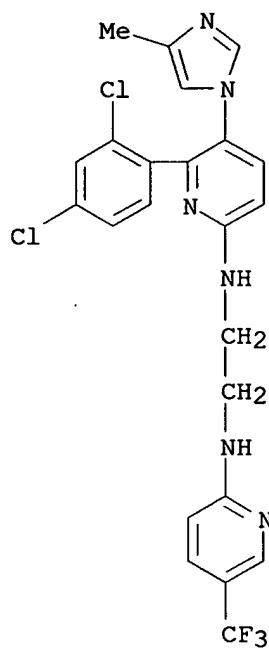
RN 252942-25-9 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



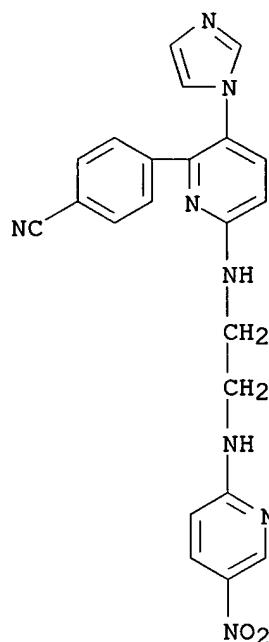
RN 252942-26-0 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-30-6 CAPLUS

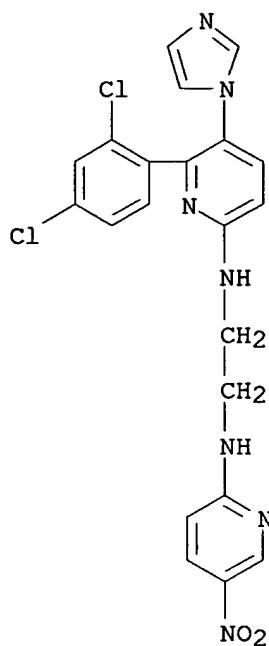
CN Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-34-0 CAPLUS

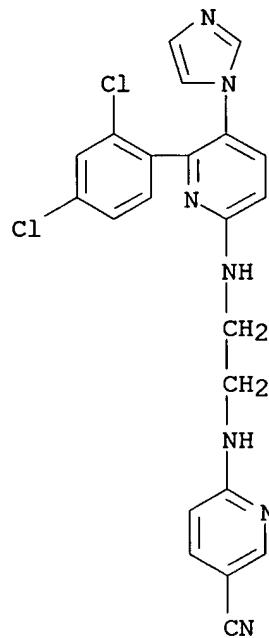
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-

pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-35-1 CAPLUS

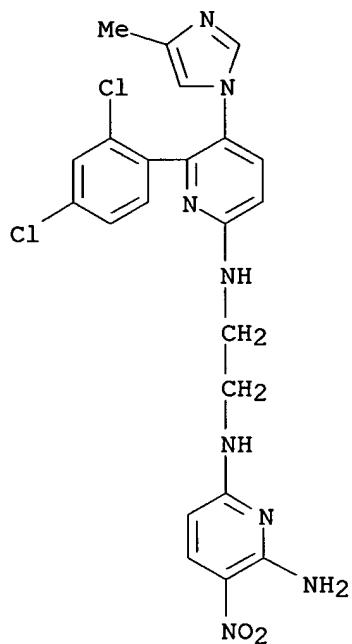
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 252942-37-3 CAPLUS

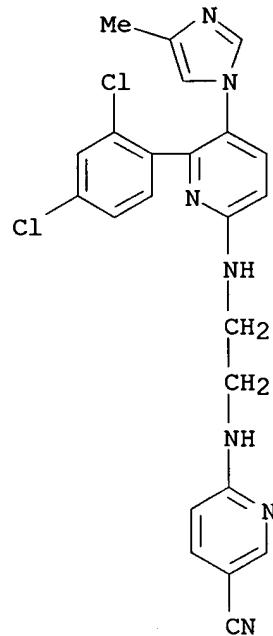
10/690, 671

CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



RN 252942-38-4 CAPLUS

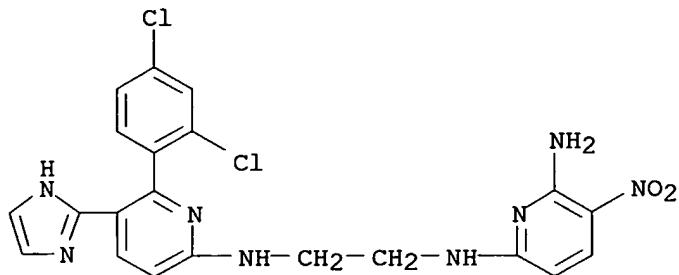
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



10/690, 671

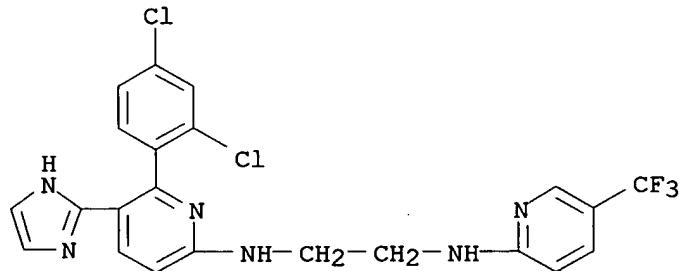
RN 252942-39-5 CAPLUS

CN 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-(6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



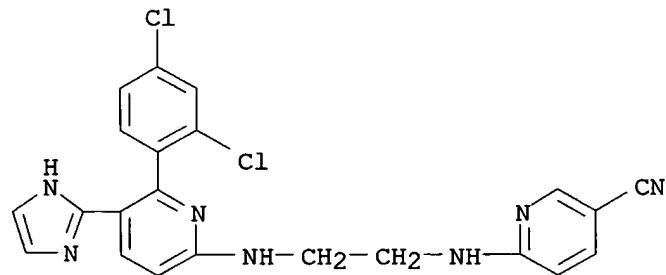
RN 252942-40-8 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-41-9 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



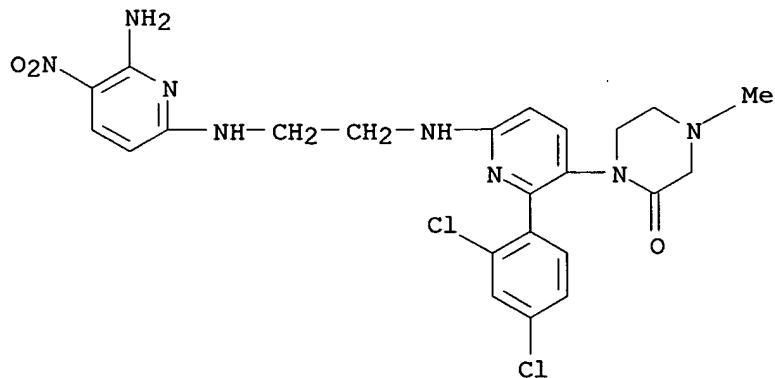
IT 403808-62-8 403808-64-0, 6-[[2-[[6-(2,4-Dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile 403808-65-1 403808-66-2, 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile 403808-67-3, 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl](methyl)amino]ethyl]amino]nicotinonitrile 403808-69-5

403808-70-8 403808-71-9 403808-72-0  
403808-73-1 403808-74-2 403808-79-7  
403808-81-1 403808-84-4 403808-85-5  
403808-86-6 403808-87-7 403808-88-8  
403808-89-9 403808-90-2 403808-91-3  
403808-92-4 403808-93-5 403808-94-6  
403808-95-7 403808-96-8 403808-98-0  
403809-00-7 403809-02-9 403809-03-0  
403809-04-1 403809-05-2 403809-06-3  
403809-07-4 403809-08-5 403809-09-6  
403809-10-9 403809-11-0 403809-12-1  
403809-13-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(preparation of aminopyrimidines and -pyridines as glycogen synthase kinase  
3 inhibitors)

RN 403808-62-8 CAPLUS

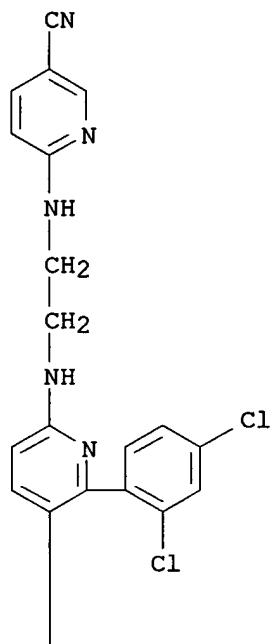
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



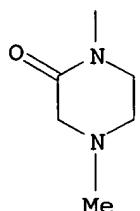
RN 403808-64-0 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

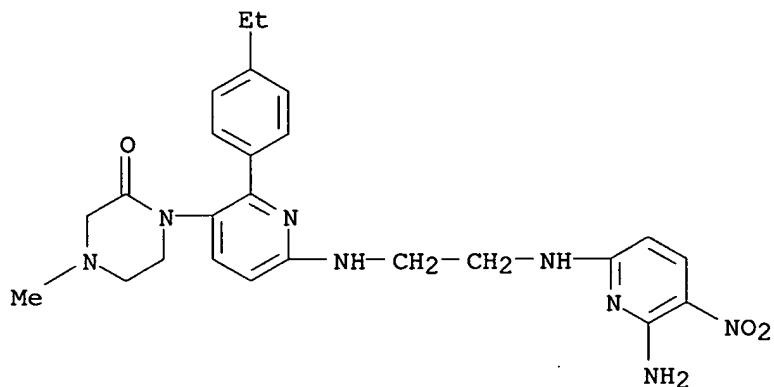


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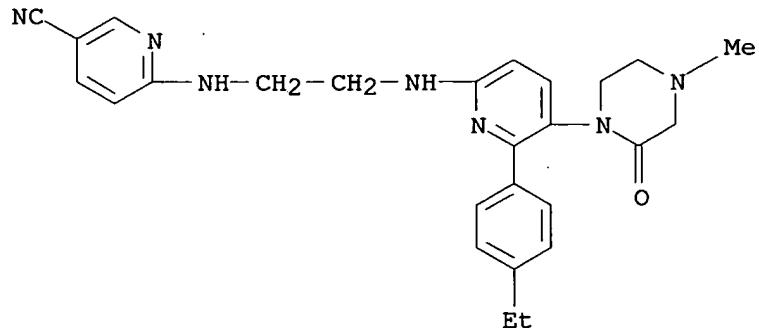
RN 403808-65-1 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-ethylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



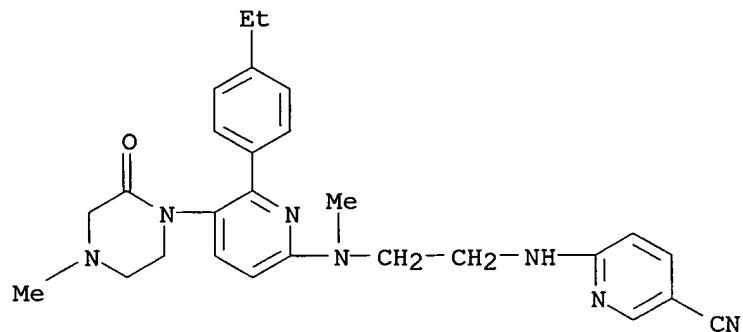
RN 403808-66-2 CAPLUS

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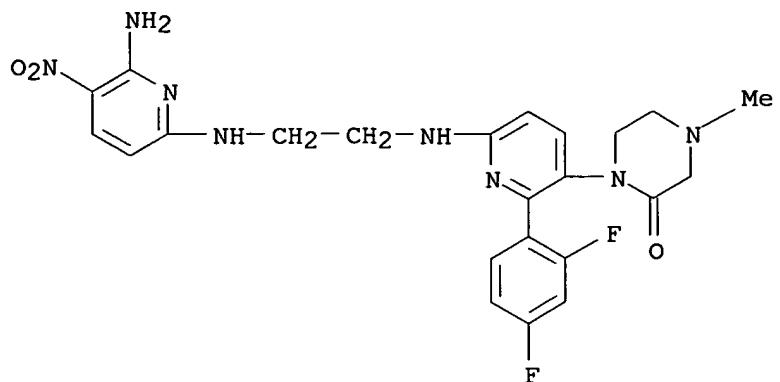
RN 403808-67-3 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]methylamino]ethyl]amino]- (9CI) (CA INDEX NAME)

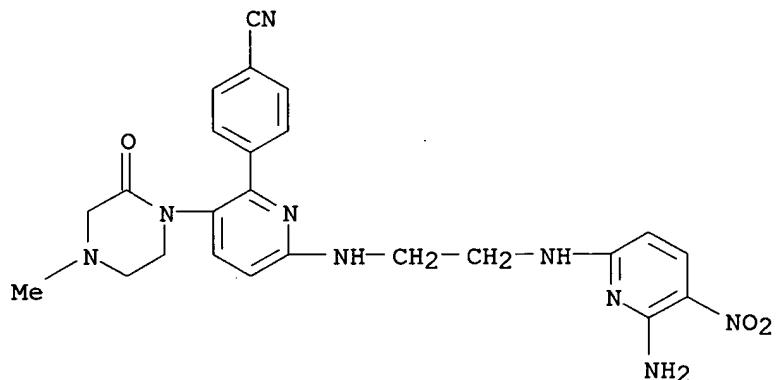


RN 403808-69-5 CAPLUS

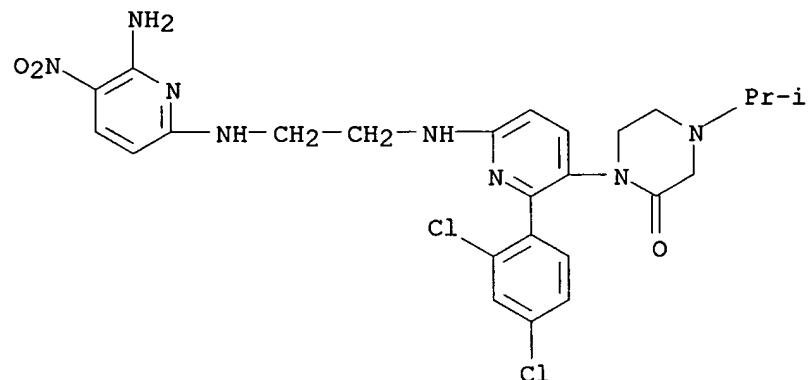
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



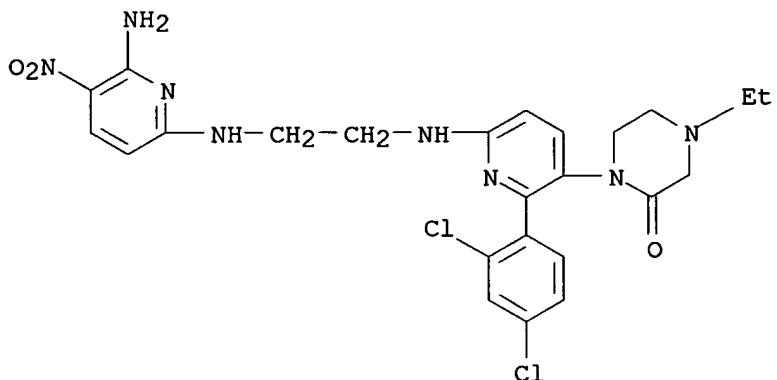
RN 403808-70-8 CAPLUS  
CN Benzonitrile, 4-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



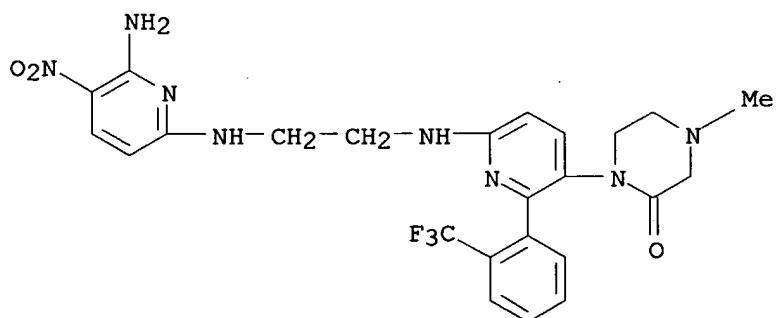
RN 403808-71-9 CAPLUS  
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



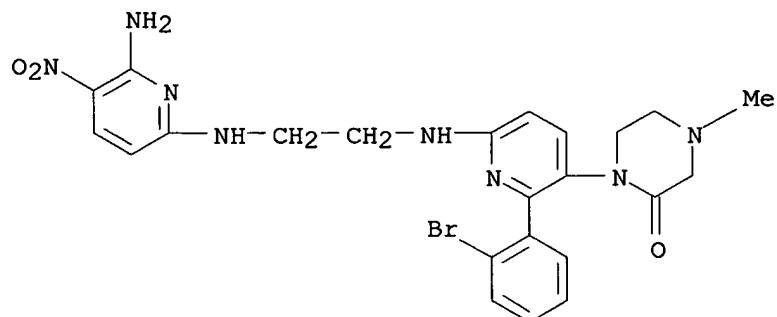
RN 403808-72-0 CAPLUS  
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 403808-73-1 CAPLUS  
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-[2-(trifluoromethyl)phenyl]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

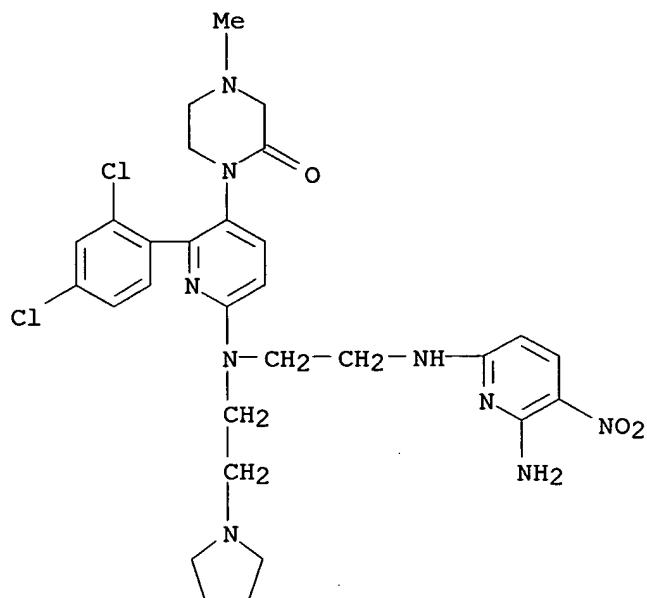


RN 403808-74-2 CAPLUS  
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



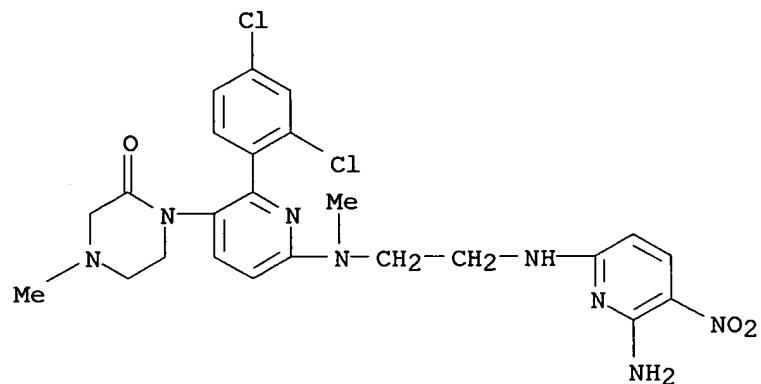
RN 403808-79-7 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)[2-(1-pyrrolidinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



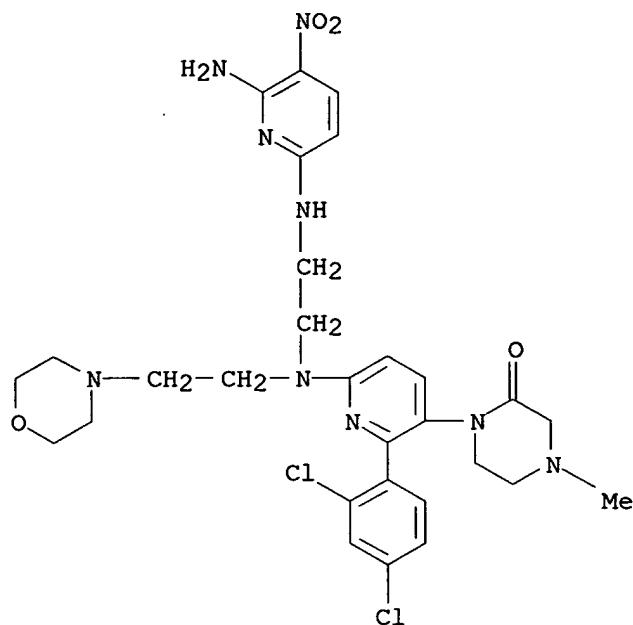
RN 403808-81-1 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)methylamino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-84-4 CAPLUS

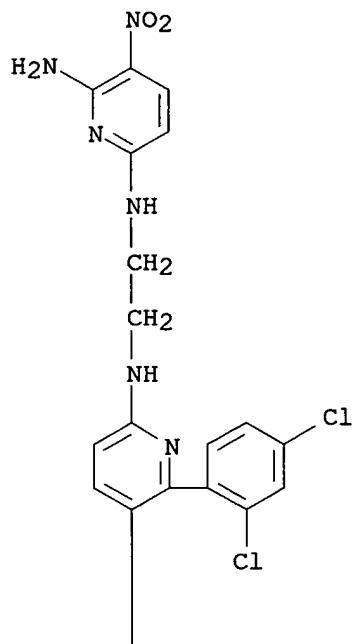
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)[2-(4-morpholinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

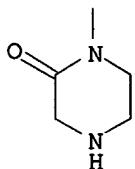


RN 403808-85-5 CAPLUS

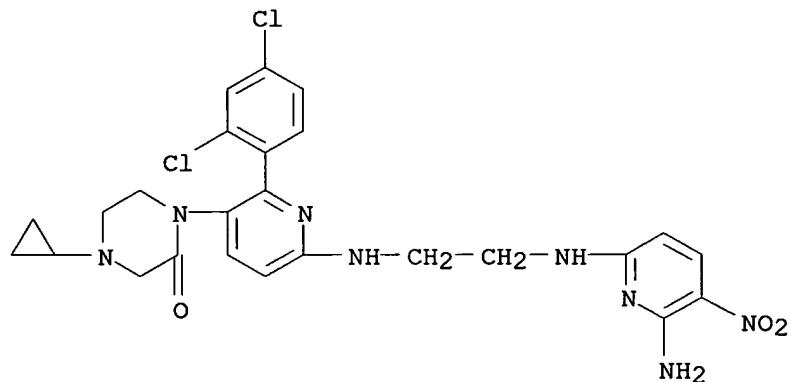
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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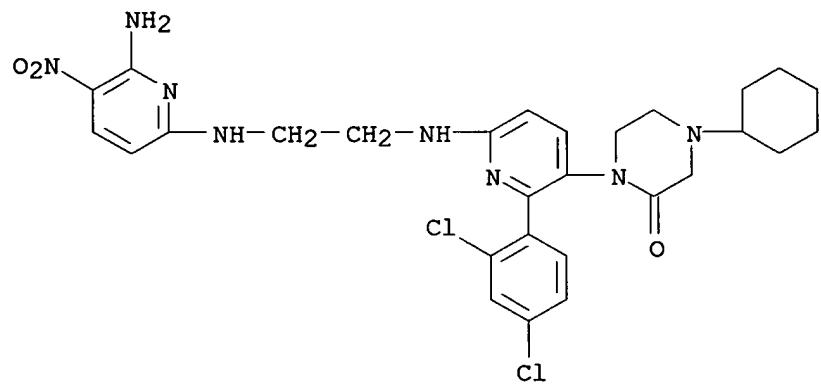




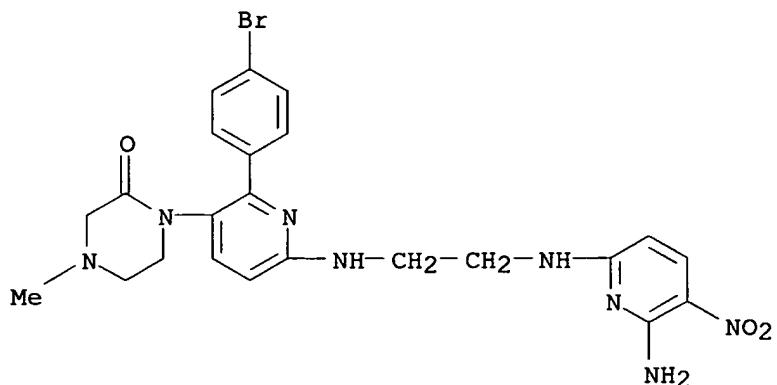
RN 403808-86-6 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclopropyl- (9CI) (CA INDEX NAME)



RN 403808-87-7 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)

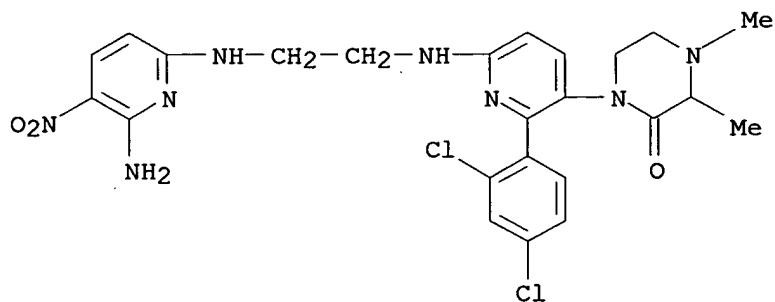


RN 403808-88-8 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-89-9 CAPLUS

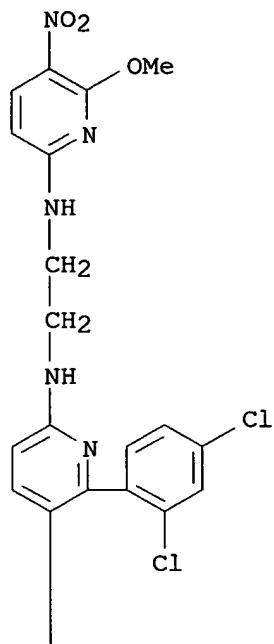
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-3,4-dimethyl- (9CI) (CA INDEX NAME)



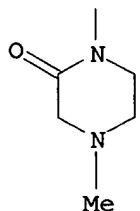
RN 403808-90-2 CAPLUS

CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(6-methoxy-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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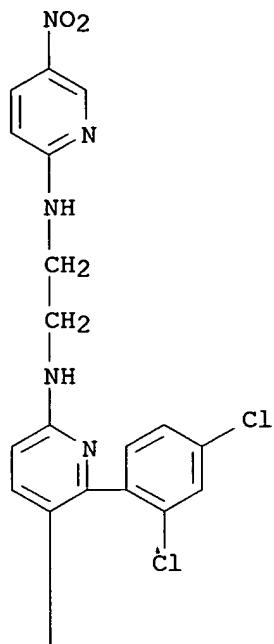
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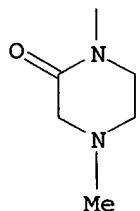
RN 403808-91-3 CAPLUS

CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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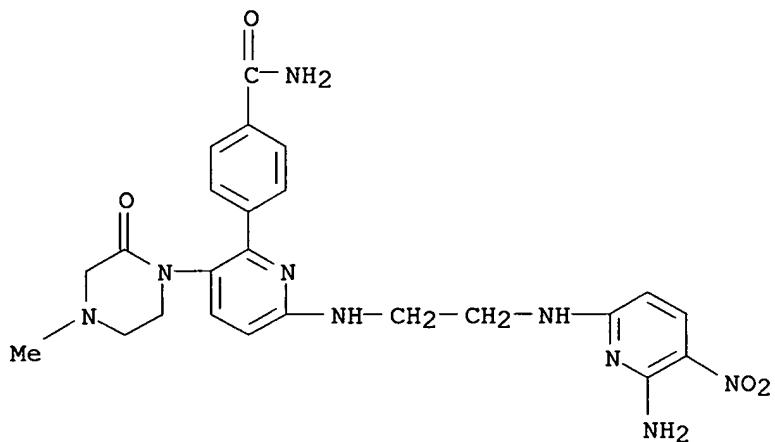


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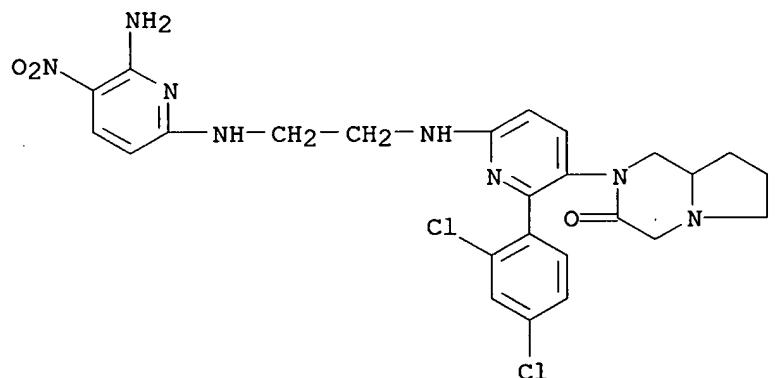
RN 403808-92-4 CAPLUS

CN Benzamide, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



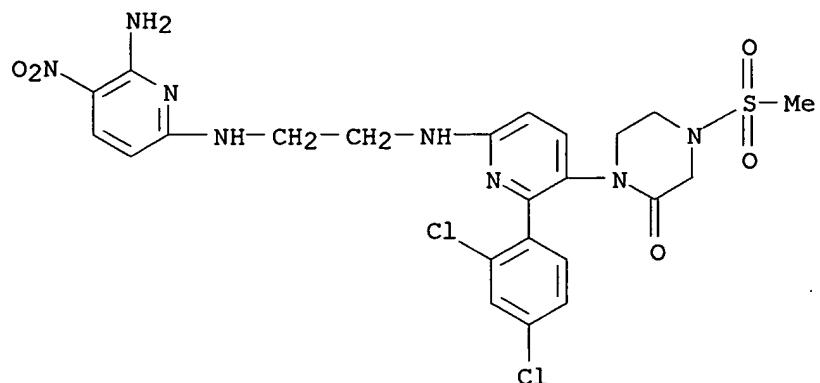
RN 403808-93-5 CAPLUS

CN Pyrrolo[1,2-a]pyrazin-3(4H)-one, 2-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro-  
(9CI) (CA INDEX NAME)



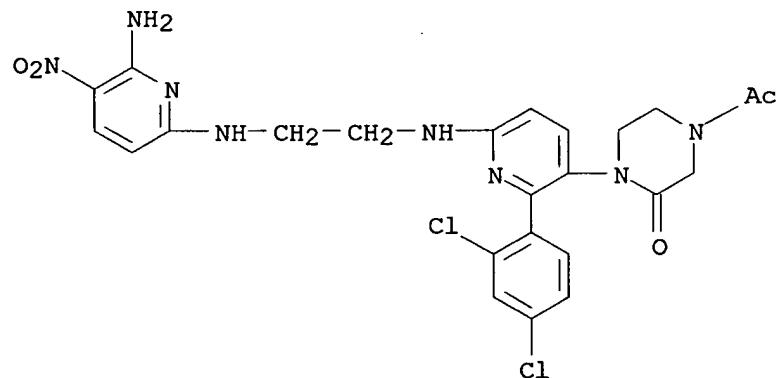
RN 403808-94-6 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)



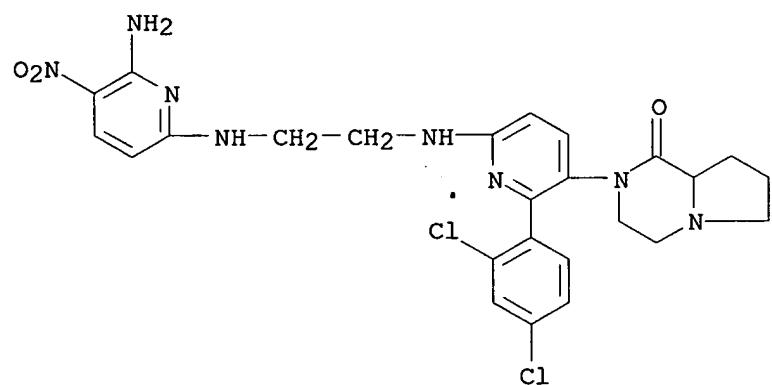
RN 403808-95-7 CAPLUS

CN Piperazinone, 4-acetyl-1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI)  
(CA INDEX NAME)



RN 403808-96-8 CAPLUS

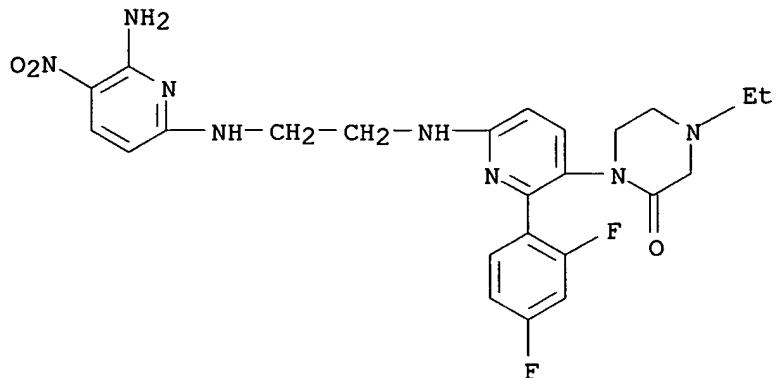
CN Pyrrolo[1,2-a]pyrazin-1(2H)-one, 2-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



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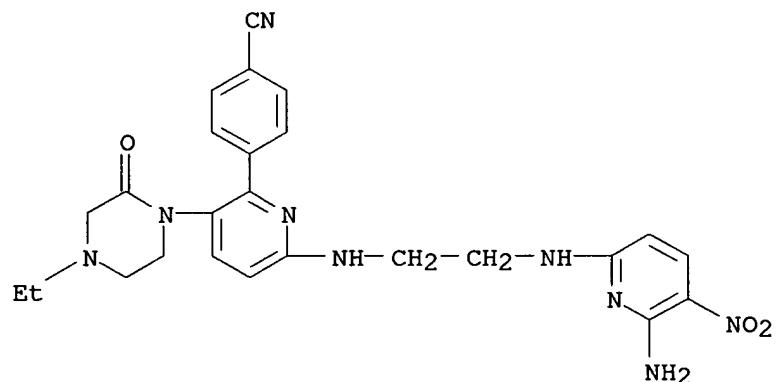
RN 403808-98-0 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



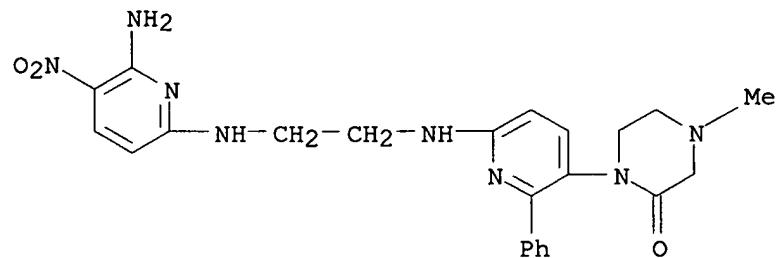
RN 403809-00-7 CAPLUS

CN Benzonitrile, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-ethyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 403809-02-9 CAPLUS

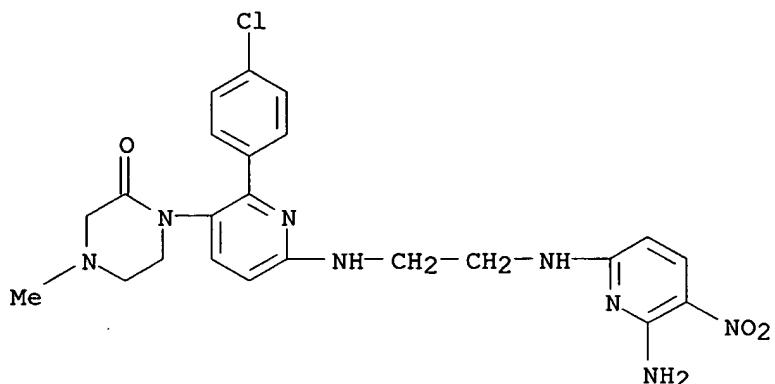
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-phenyl-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-03-0 CAPLUS

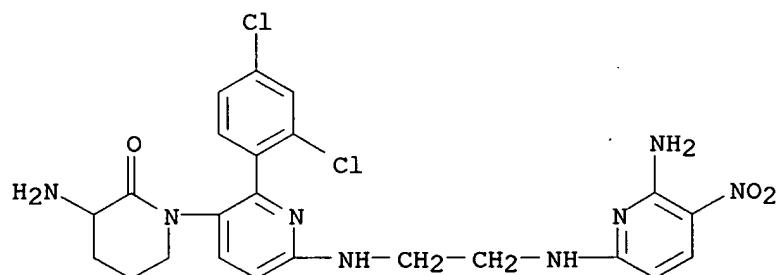
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CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



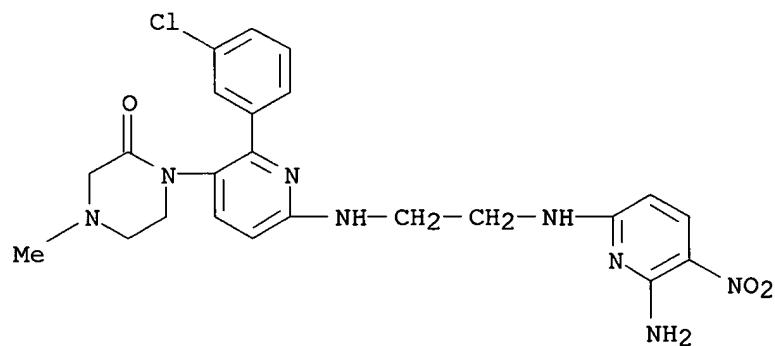
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CN 2-Piperidinone, 3-amino-1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 403809-05-2 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(3-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

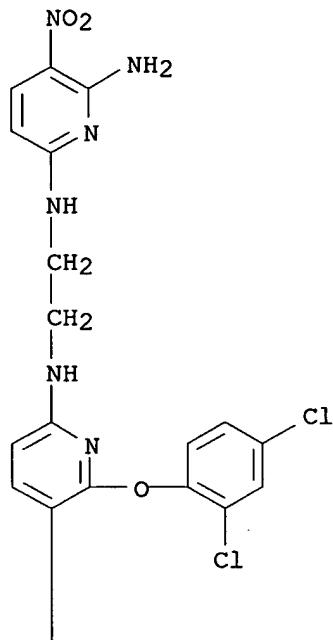


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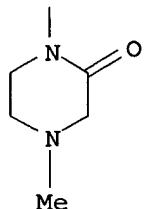
10/690,671

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenoxy)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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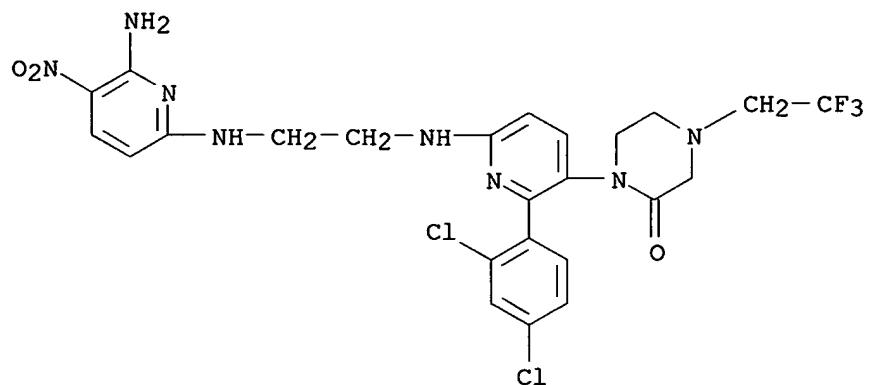


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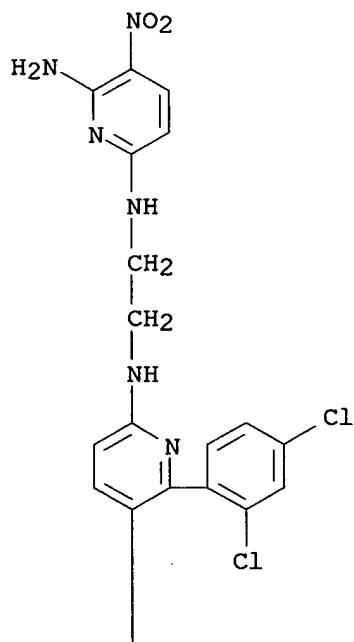
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



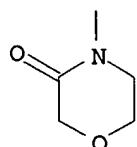
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CN 3-Morpholinone, 4-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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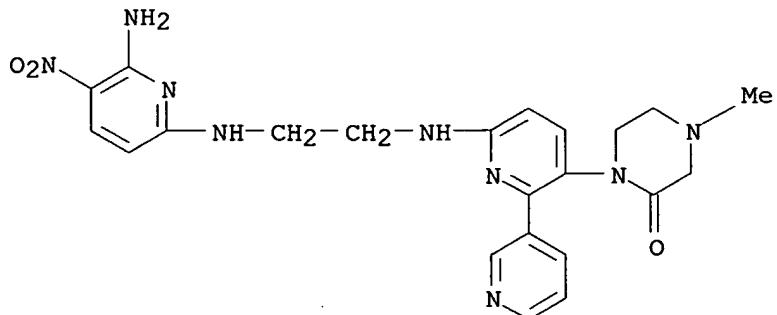
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10/690,671

RN 403809-09-6 CAPLUS

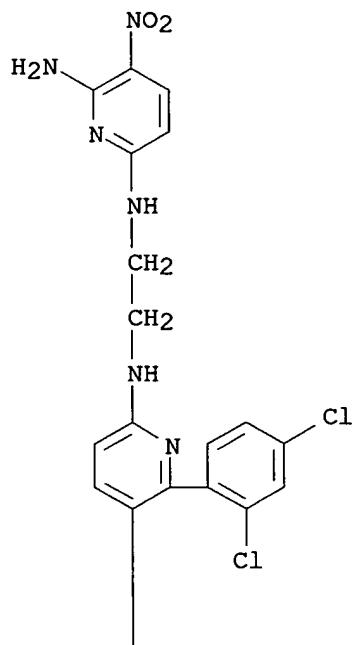
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino][2,3'-bipyridin]-3-yl]-4-methyl- (9CI) (CA INDEX NAME)

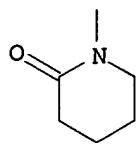


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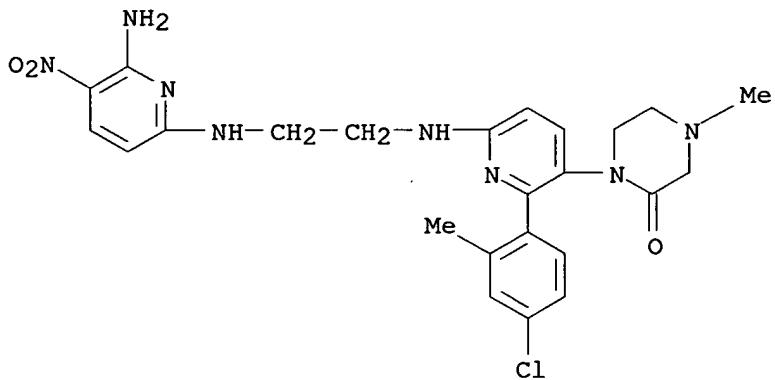
CN 2-Piperidinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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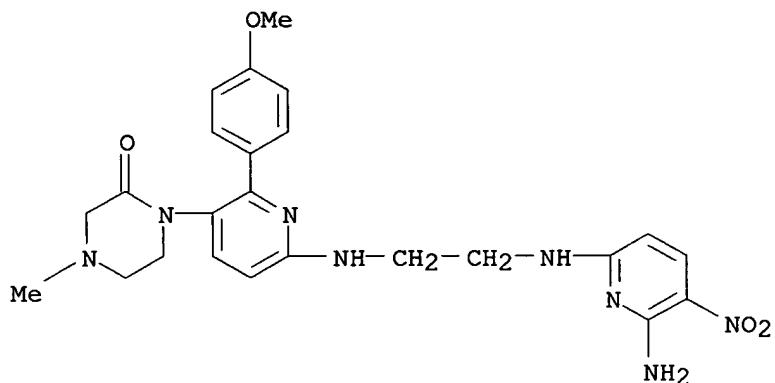




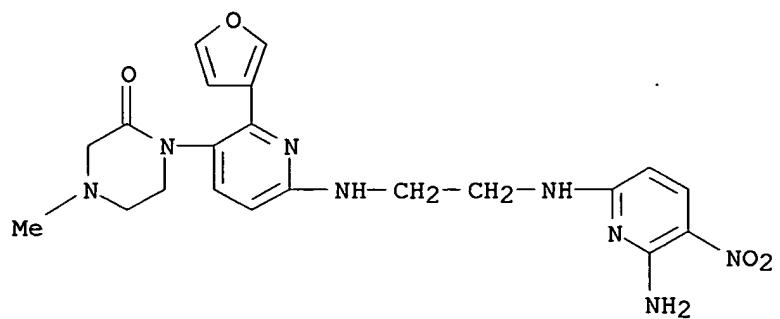
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 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-chloro-2-methylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-12-1 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-methoxyphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-13-2 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(3-furanyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



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ACCESSION NUMBER: 2002:788799 CAPLUS

DOCUMENT NUMBER: 138:255068

TITLE: Pyridinium N-(2'-azinyl)aminides: regioselective synthesis of N-(2-pyridyl) substituted polyamines

AUTHOR(S): Jose Reyes, M.; Delgado, Francisca; Luisa Izquierdo, M.; Alvarez-Builla, Julio

CORPORATE SOURCE: Departamento de Quimica Organica, Universidad de Alcala, Madrid, 28871, Spain

SOURCE: Tetrahedron (2002), 58(42), 8573-8579  
CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:255068

AB The regioselective alkylation of pyridinium-N-(2'-pyridyl)aminide with alkyl dihalides under mild conditions, followed by N-N bond reduction of the corresponding bis-salts, allowed an easy preparation of N,N'-bis(2-pyridyl)diamines. The same methodol. has been applied to the synthesis of N,N',N'''-tris(2-pyridyl)triamines.

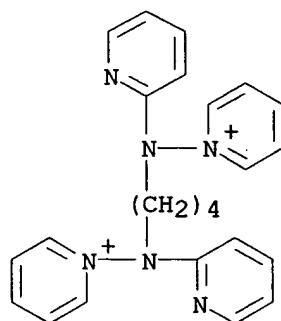
IT 502615-50-1P 502615-51-2P 502615-52-3P

502615-53-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(reduction of; preparation of bis(pyridyl)diamines and tris(pyridyl)triamines

via regioselective alkylation of pyridinium(pyridyl)aminides followed by reduction of corresponding bis-salts)

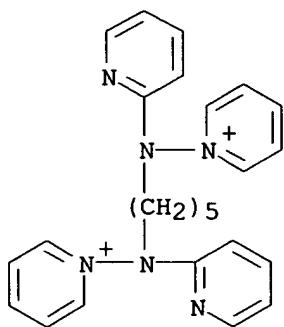
RN 502615-50-1 CAPLUS

CN Pyridinium, 1,1'-[1,4-butanediylbis(2-pyridinylimino)]bis-, diiodide (9CI)  
(CA INDEX NAME)

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RN 502615-51-2 CAPLUS

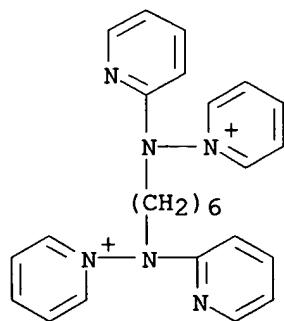
CN Pyridinium, 1,1'-[1,5-pentanediylylbis(2-pyridinylimino)]bis-, diiodide (9CI) (CA INDEX NAME)



●2 I<sup>-</sup>

RN 502615-52-3 CAPLUS

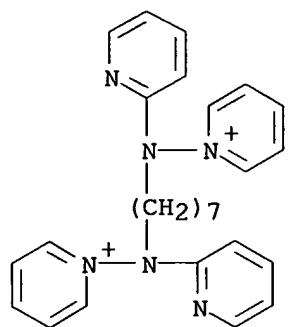
CN Pyridinium, 1,1'-[1,6-hexanediylbis(2-pyridylimino)]bis-, diiodide (9CI)  
(CA INDEX NAME)



●2 I<sup>-</sup>

RN 502615-53-4 CAPLUS

CN Pyridinium, 1,1'-[1,7-heptanediylbis(2-pyridylimino)]bis-, dibromide  
(9CI) (CA INDEX NAME)



●2 Br<sup>-</sup>

REFERENCE COUNT:

29

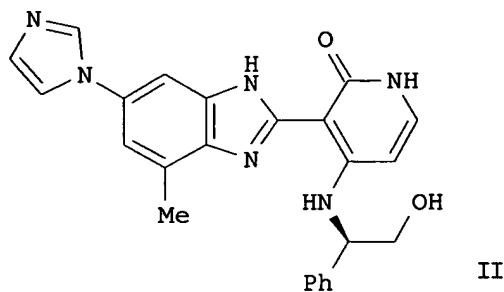
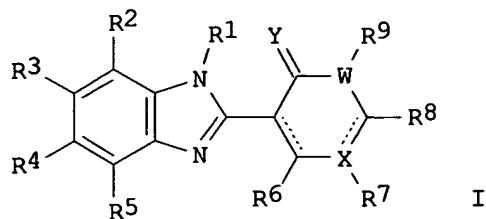
THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,671

LX3 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:777929 CAPLUS  
DOCUMENT NUMBER: 137:294954  
TITLE: Preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors  
INVENTOR(S): Wittman, Mark D.; Balasubramanian, Neelakantan; Velaparthi, Upender; Zimmermann, Kurt; Saulnier, Mark G.; Liu, Peiying; Sang, Xiaopeng; Frennesson, David B.; Stoffan, Karen M.; Tarrant, James G.  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
SOURCE: PCT Int. Appl., 249 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002079192	A1	20021010	WO 2002-US9402	20020326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2442428	AA	20021010	CA 2002-2442428	20020326
EP 1381598	A1	20040121	EP 2002-723631	20020326
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200300475	A	20040216	EE 2003-475	20020326
CN 1514833	A	20040721	CN 2002-810516	20020326
JP 2004534010	T2	20041111	JP 2002-577817	20020326
BR 2002008373	A	20050222	BR 2002-8373	20020326
ZA 2003007466	A	20050113	ZA 2003-7466	20030925
NO 2003004308	A	20031126	NO 2003-4308	20030926
BG 108206	A	20041130	BG 2003-108206	20030926
PRIORITY APPLN. INFO.:			US 2001-279327P	P 20010328
			WO 2002-US9402	W 20020326

OTHER SOURCE(S): MARPAT 137:294954  
GI



**AB** The title compds. [I; X = N, C, a bond, etc.; Y = O, S; W = N, C, O, S (if W = O or S, then R9 is absent); R1-R9 = H, alkyl, cycloalkyl, etc.] and their pharmaceutically acceptable salts which inhibit tyrosine kinase enzymes thereby making them useful as anti-cancer agents, were prepared. Thus, reacting 3-[6-(imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-iodo-1H-pyridin-2-one (preparation given) with (S)-(-)-2-phenylglycinol in the presence of N-methylmorpholine in DMF afforded 52% (S)-II which showed IC<sub>50</sub> of 1.0 μM in cytotoxicity assay (HT-29 human colon tumor cell line). 30 Of the exemplified compds. I showed kinase activity of <25μM against one or more of the following kinases CDK, EMT, FAK, Her1, Her2, IGF, IR, LCK, MET, PDGF, VEGF. The compds. I are also useful for the treatment of other diseases which can be treated by inhibiting tyrosine kinase enzymes.

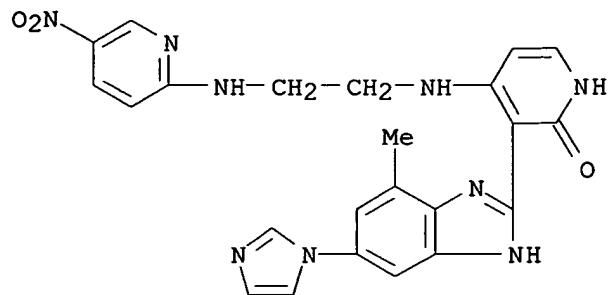
**IT** **468735-06-0P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors)

**RN** 468735-06-0 CAPLUS

**CN** 2(1H)-Pyridinone, 3-[6-(1H-imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:240954 CAPLUS  
 DOCUMENT NUMBER: 136:275370  
 TITLE: Crystallization and crystal structure of human glycogen synthase kinase 3 $\beta$  protein and methods of use thereof  
 INVENTOR(S): Bussiere, Dirkse E.; He, Min; Le, Vincent P.; Jansen, Johanna M.; Chin, S. Michael; Martin, Eric  
 PATENT ASSIGNEE(S): Chiron Corporation, USA  
 SOURCE: PCT Int. Appl., 200 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024893	A2	20020328	WO 2001-US29549	20010919
WO 2002024893	A3	20030904		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001092906	A5	20020402	AU 2001-92906	20010919
EP 1360286	A2	20031112	EP 2001-973313	20010919
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004533597	T2	20041104	JP 2002-529488	20010919
US 2004101907	A1	20040527	US 2003-450422	20031211
PRIORITY APPLN. INFO.:			US 2000-233538P	P 20000919
			WO 2001-US29549	W 20010919

AB The invention provides the three-dimensional structure of a construct of human glycogen synthase kinase 3 (GSK3); crystals of a construct of human glycogen synthase kinase 3- $\beta$  (GSK3- $\beta$ ); containing the protein's catalytic kinase domain; a domain for crystallizing the protein construct to provide a GSK3 crystal sufficient for structure determination; and a method for using the GSK3 construct's three dimensional structure for the identification of possible therapeutic compds. in the treatment of various disease conditions mediated by GSK3 activity.

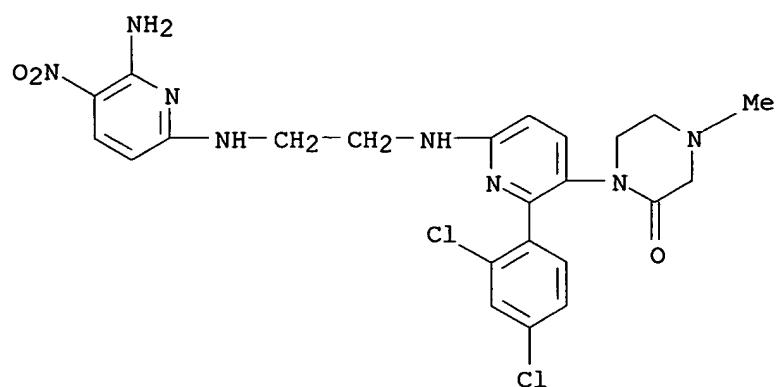
IT 403808-62-8

RL: NUU (Other use, unclassified); USES (Uses)  
 (GSK3 crystals containing; crystallization and crystal structure of human glycogen

synthase kinase 3 $\beta$  protein and methods of use thereof)

RN 403808-62-8 CAPLUS

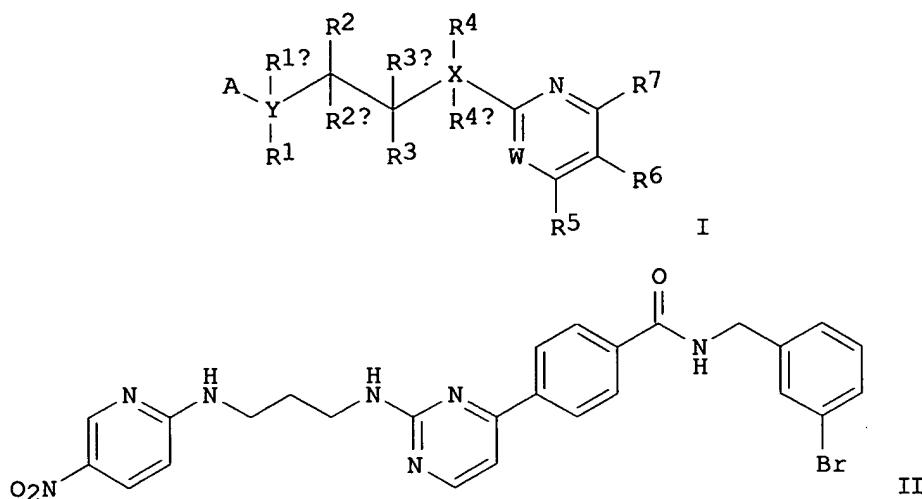
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



E13 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:185092 CAPLUS  
 DOCUMENT NUMBER: 136:247598  
 TITLE: Preparation of aminopyrimidines and -pyridines as  
 glycogen synthase kinase 3 inhibitors  
 INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.;  
 Boyce, Rustum S.; Johnson, Kirk; Pfister, Keith B.;  
 Ramurthy, Savithri; Seely, Lynn; Wagman, Allan S.;  
 Desai, Manoj; Levine, Barry H.  
 PATENT ASSIGNEE(S): Chiron Corporation, USA  
 SOURCE: PCT Int. Appl., 268 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020495	A2	20020314	WO 2001-US42081	20010906
WO 2002020495	A3	20020620		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001095026	A5	20020322	AU 2001-95026	20010906
EP 1317433	A2	20030611	EP 2001-975734	20010906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004514656	T2	20040520	JP 2002-525117	20010906
PRIORITY APPLN. INFO.:			US 2000-230480P	P 20000906
			WO 2001-US42081	W 20010906

OTHER SOURCE(S): MARPAT 136:247598  
 GI



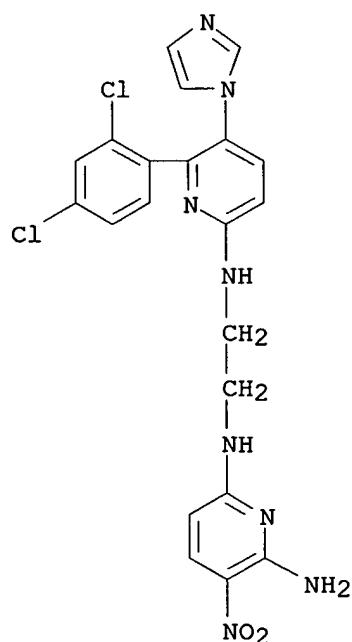
**AB** Title compds. I [wherein W = (un)substituted C or N; X and Y = independently N, O, or (un)substituted C; A = (un)substituted (hetero)aryl; R1, R1a, R2, R2a, R3, R3a, R4, and R4a = independently H, OH, alkoxy, acyl, (hetero)aryl, or (un)substituted (cyclo)alkyl, amino(alkyl), etc. ; R5 and R7 = independently H, halo, alkoxy, guanidinyl, (bi)aryl, hetero(bi)aryl, heterocycloalkyl, arylsulfonamido, or (un)substituted (cyclo)alkyl, amino(alkoxy), or amidino; R6 = H, halo, carboxyl, NO<sub>2</sub>, (cyclo)amido, (cyclo)amidino, (cyclo)imido, CN, alkoxy, acyl(oxy), guanidinyl, (hetero)aryl, heterocyclo(alkyl), arylsulfonyl, arylsulfonamido, or (un)substituted alkyl, amino, etc.] were prepared as glycogen synthase kinase 3 (GSK3) inhibitors. For example, 2-chloro-5-nitropyridine was aminated by H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine. The latter was cyclocondensed with resin-bound 4-(MeCO)C<sub>6</sub>H<sub>4</sub>CONHCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Br-3 and Cs<sub>2</sub>CO<sub>3</sub> to afford, after resin cleavage, the pyrimidinamine II. The most preferred compds. of the invention exhibited inhibitory activity against human GSK3 $\beta$  in a cell free assay with IC<sub>50</sub> values of < 1  $\mu$ M. Thus, I and compns. containing I may be employed alone or in combination with other pharmacol. active agents in the treatment of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, or cancer (no data).

IT 252917-05-8P, 2,6-Pyridinediamine, N6-[2-[(6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl)amino]ethyl]-3-nitro-  
 252936-05-3P, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- 252938-13-9P  
 , 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)-  
 252942-25-9P, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)-  
 252942-26-0P, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)-  
 252942-30-6P, Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-pyridinyl]- 252942-34-0P,  
 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-

pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252942-35-1P**,  
 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- **252942-37-3P**,  
 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- **252942-38-4P**,  
 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- **252942-39-5P**,  
 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-(6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl)- **252942-40-8P**,  
 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- **252942-41-9P**,  
 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]-  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
     (preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

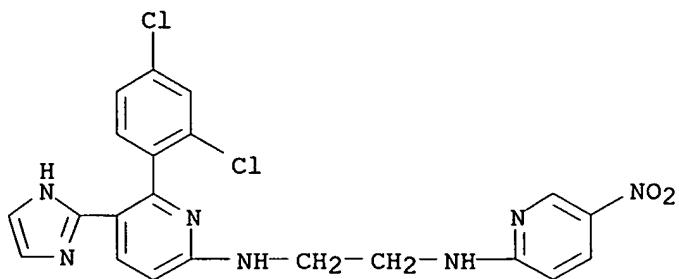
RN 252917-05-8 CAPLUS

CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



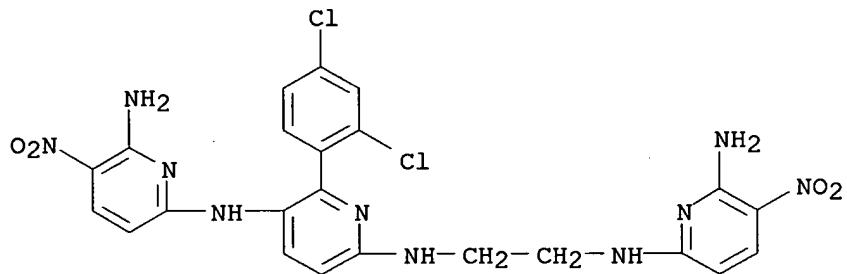
RN 252936-05-3 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



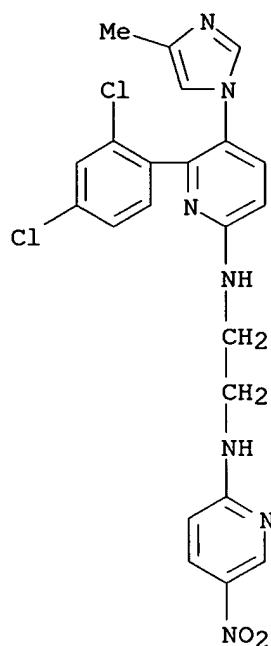
RN 252938-13-9 CAPLUS

CN 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



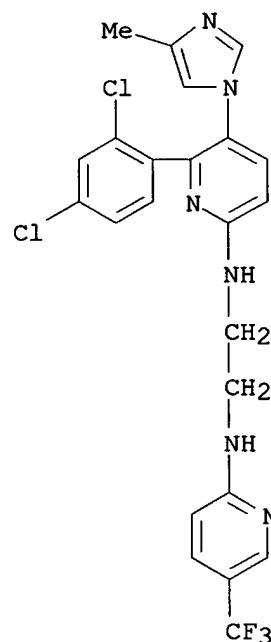
RN 252942-25-9 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-26-0 CAPLUS

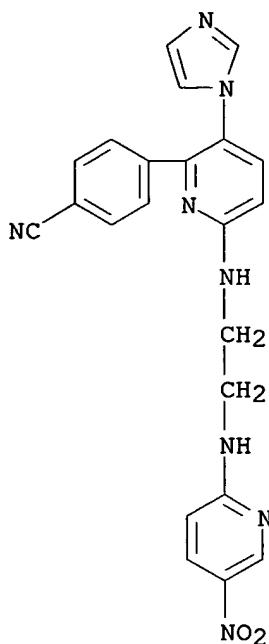
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-30-6 CAPLUS

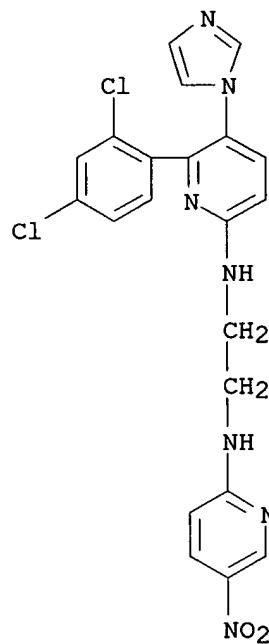
CN Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-

pyridinyl)amino]ethyl]amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-34-0 CAPLUS

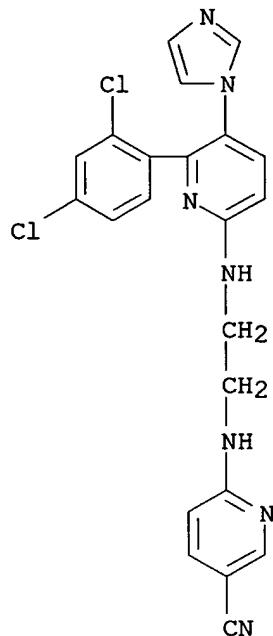
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



10/690,671

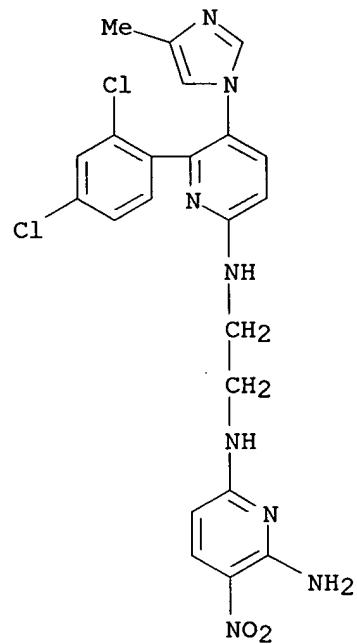
RN 252942-35-1 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

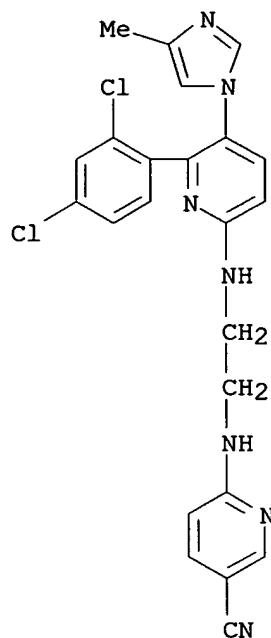


RN 252942-37-3 CAPLUS

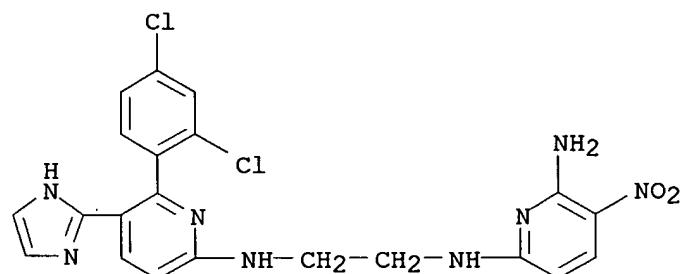
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



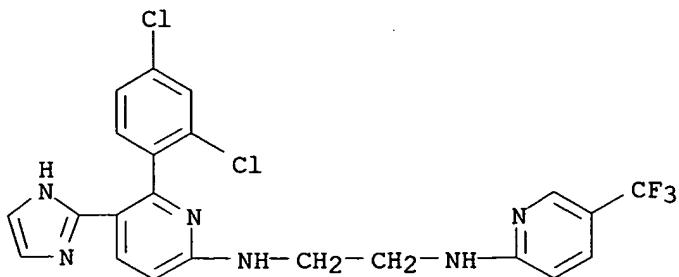
RN 252942-38-4 CAPLUS  
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 252942-39-5 CAPLUS  
CN 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

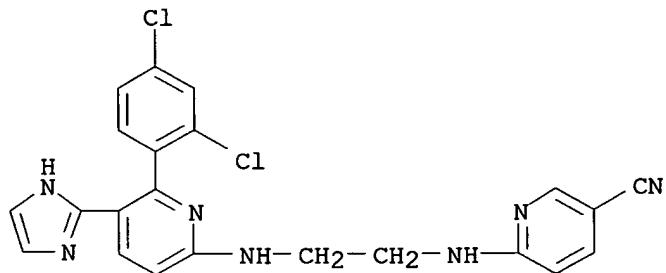


RN 252942-40-8 CAPLUS  
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-41-9 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

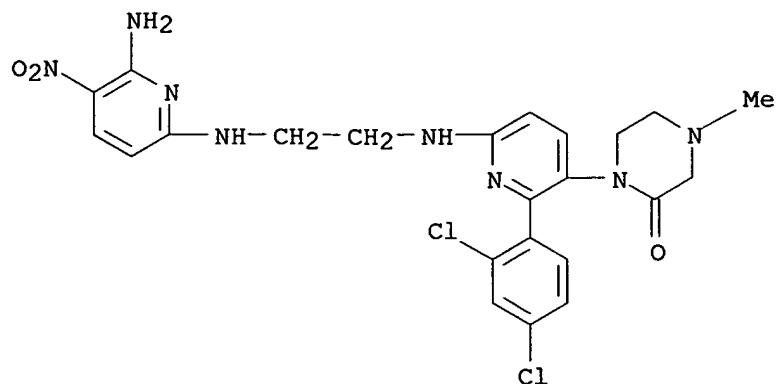


IT 403808-62-8 403808-64-0, 6-[[2-[[6-(2,4-Dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile 403808-65-1 403808-66-2, 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile 403808-67-3, 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl](methyl)amino]ethyl]amino]nicotinonitrile 403808-69-5  
 403808-70-8 403808-71-9 403808-72-0  
 403808-73-1 403808-74-2 403808-79-7  
 403808-81-1 403808-84-4 403808-85-5  
 403808-86-6 403808-87-7 403808-88-8  
 403808-89-9 403808-90-2 403808-91-3  
 403808-92-4 403808-93-5 403808-94-6  
 403808-95-7 403808-96-8 403808-98-0  
 403809-00-7 403809-02-9 403809-03-0  
 403809-04-1 403809-05-2 403809-06-3  
 403809-07-4 403809-08-5 403809-09-6  
 403809-10-9 403809-11-0 403809-12-1  
 403809-13-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

RN 403808-62-8 CAPLUS

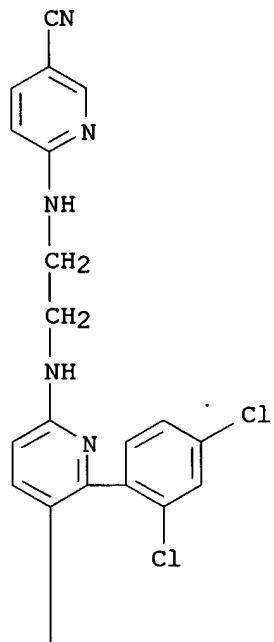
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl-4-methyl- (9CI) (CA INDEX NAME)

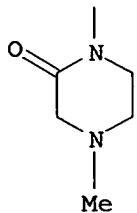


RN 403808-64-0 CAPLUS

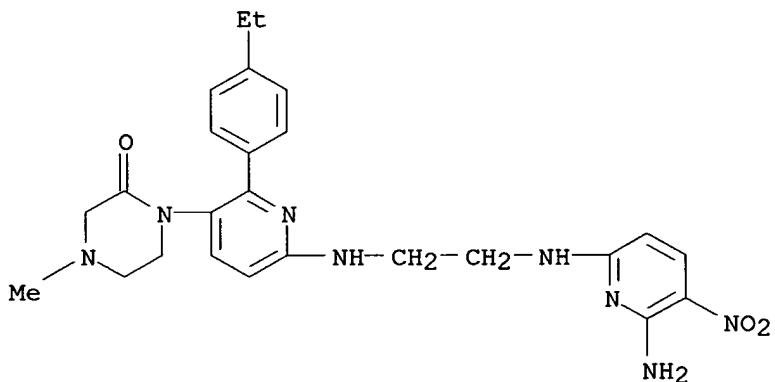
CN 3-Pyridinecarbonitrile, 6-[[2-[(6-(2,4-dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl)amino]ethyl]amino]- (9CI) (CA INDEX NAME)

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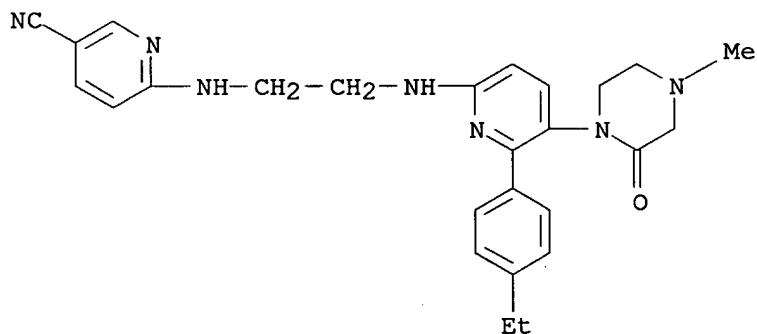




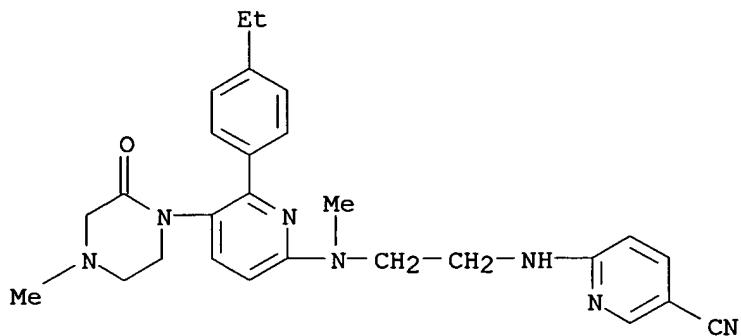
RN 403808-65-1 CAPLUS  
 CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-ethylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-66-2 CAPLUS  
 CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

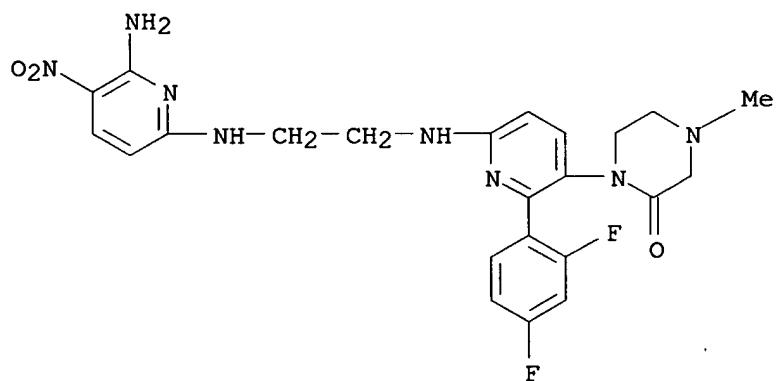


RN 403808-67-3 CAPLUS  
 CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]methylamino]ethyl]amino]- (9CI) (CA INDEX NAME)



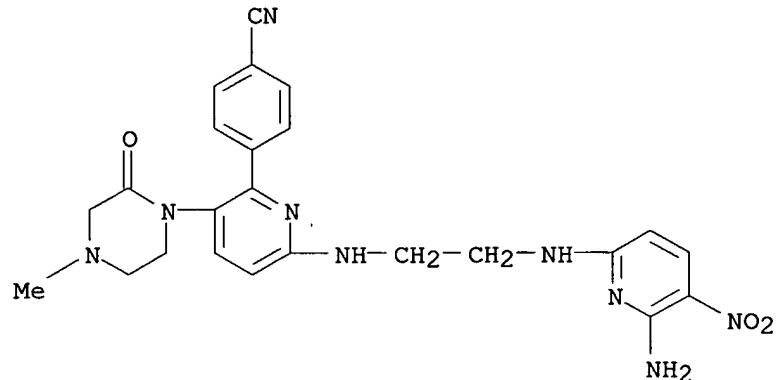
RN 403808-69-5 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-70-8 CAPLUS

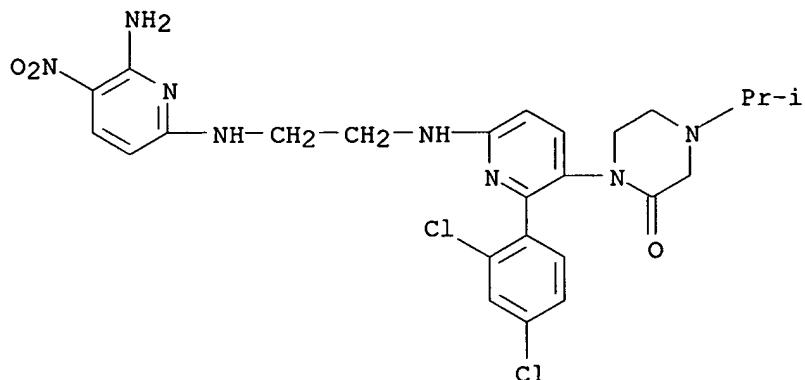
CN Benzonitrile, 4-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 403808-71-9 CAPLUS

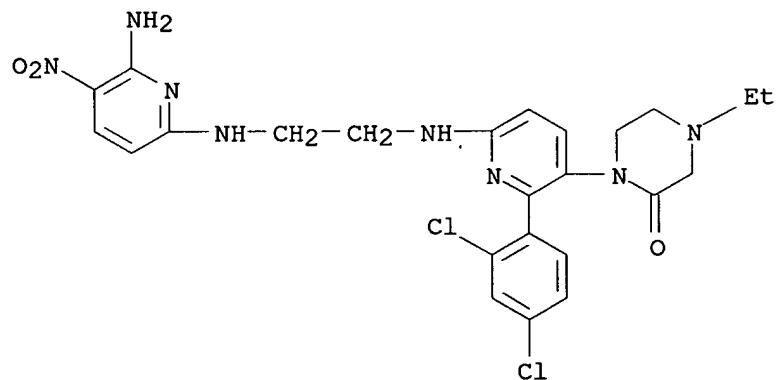
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-

(2,4-dichlorophenyl)-3-pyridinyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



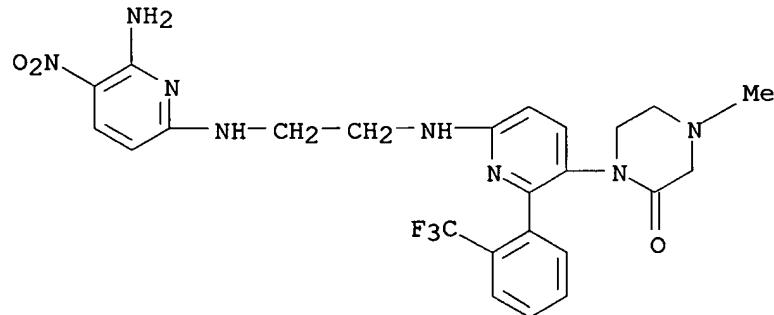
RN 403808-72-0 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 403808-73-1 CAPLUS

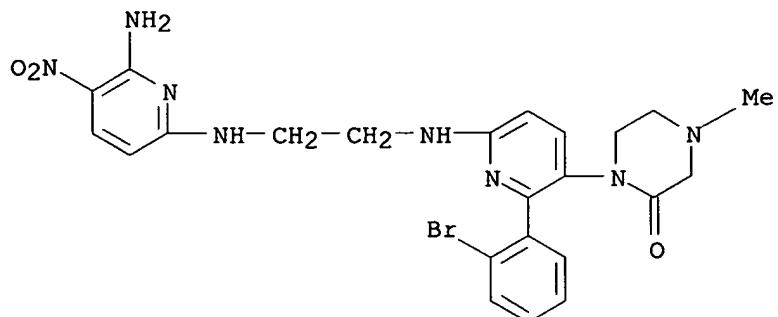
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-[2-(trifluoromethyl)phenyl]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-74-2 CAPLUS

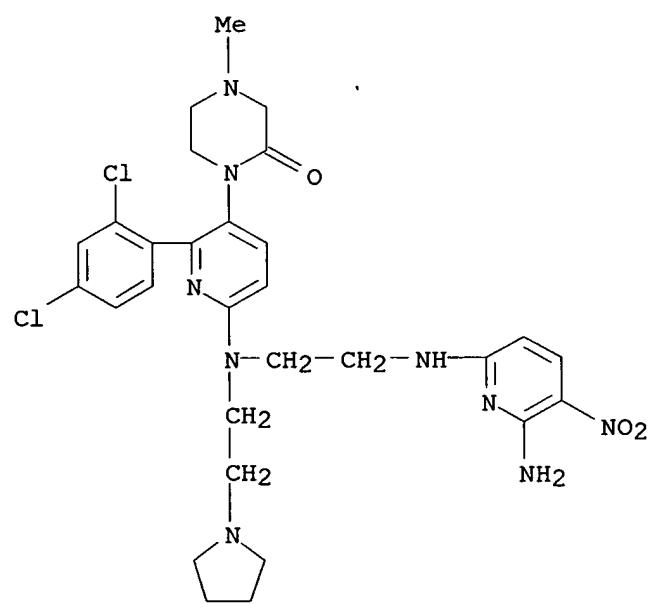
10/690, 671

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



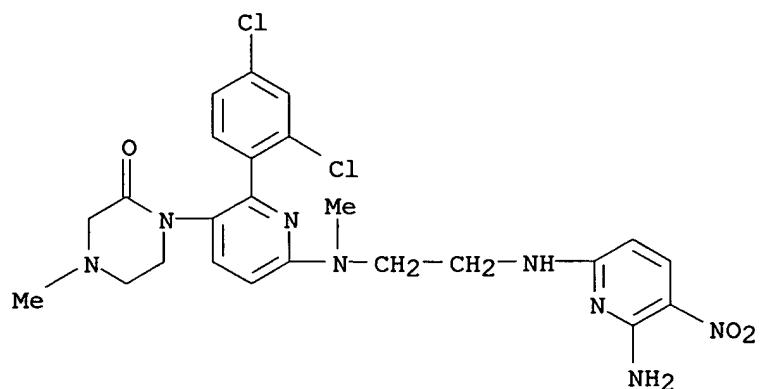
RN 403808-79-7 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



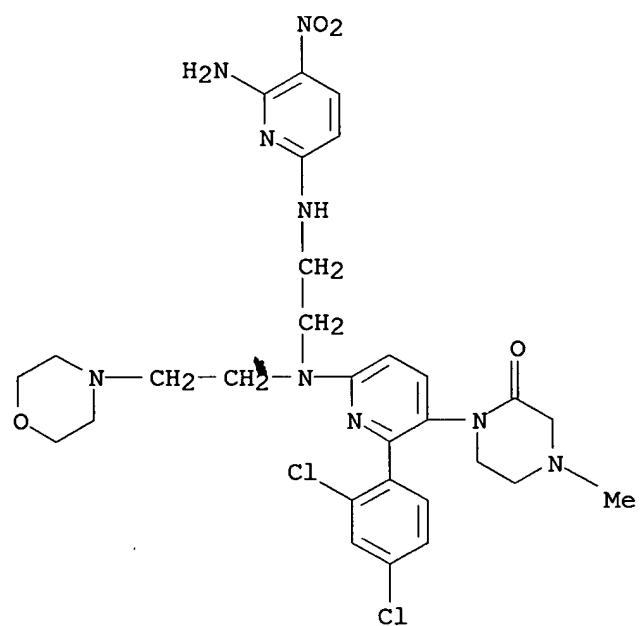
RN 403808-81-1 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)methylamino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-84-4 CAPLUS

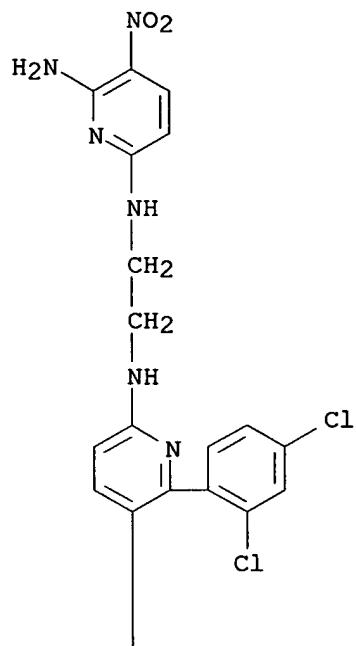
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl][2-(4-morpholinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl-(9CI) (CA INDEX NAME)



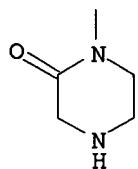
RN 403808-85-5 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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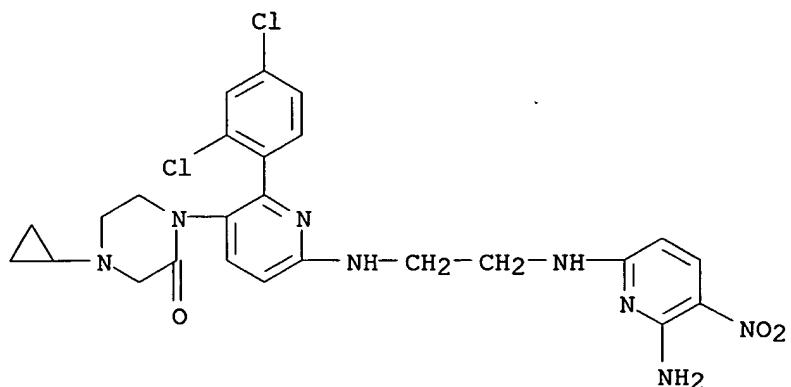


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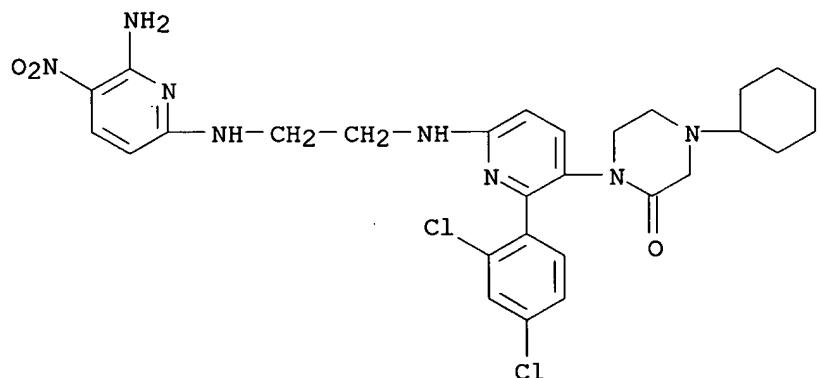
RN 403808-86-6 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclopropyl- (9CI) (CA INDEX NAME)



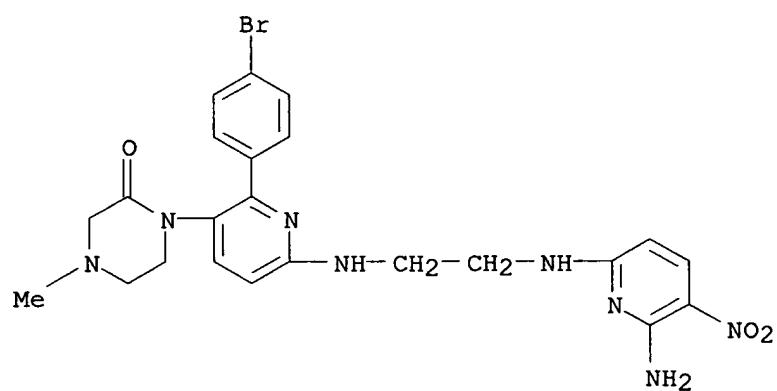
RN 403808-87-7 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)



RN 403808-88-8 CAPLUS

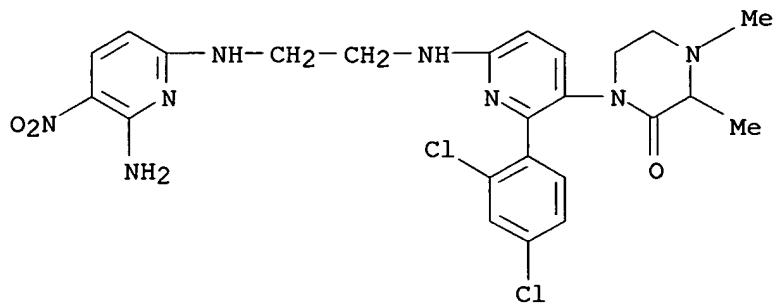
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



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RN 403808-89-9 CAPLUS

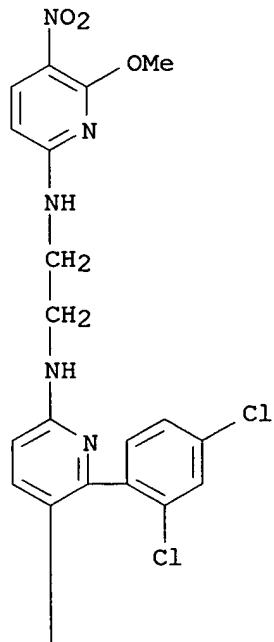
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-3,4-dimethyl- (9CI) (CA INDEX NAME)



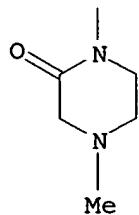
RN 403808-90-2 CAPLUS

CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[(2-[(6-methoxy-5-nitro-2-pyridinyl)amino]ethyl)amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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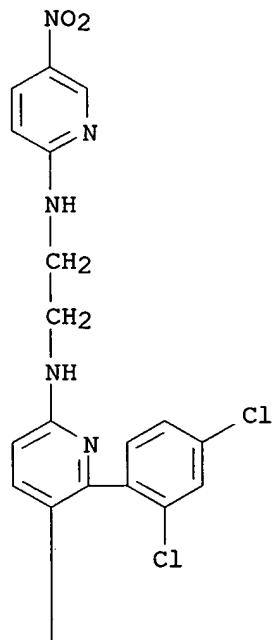
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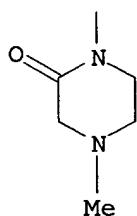
RN 403808-91-3 CAPLUS

CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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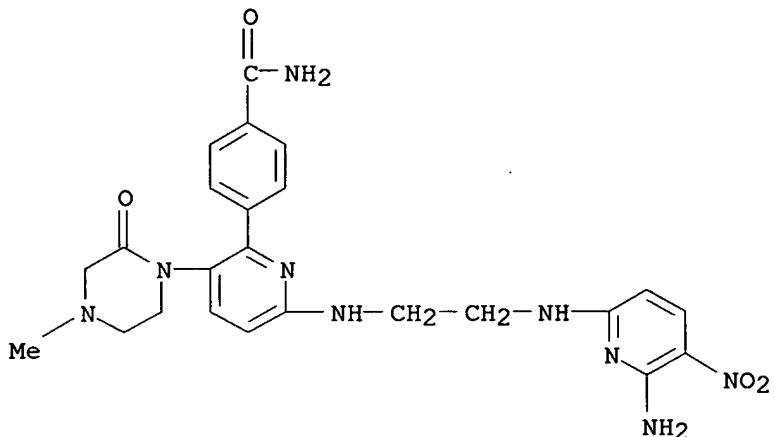


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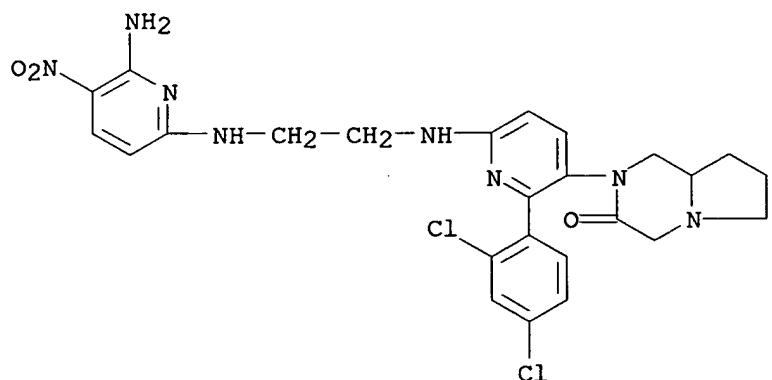
RN 403808-92-4 CAPLUS

CN Benzamide, 4-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



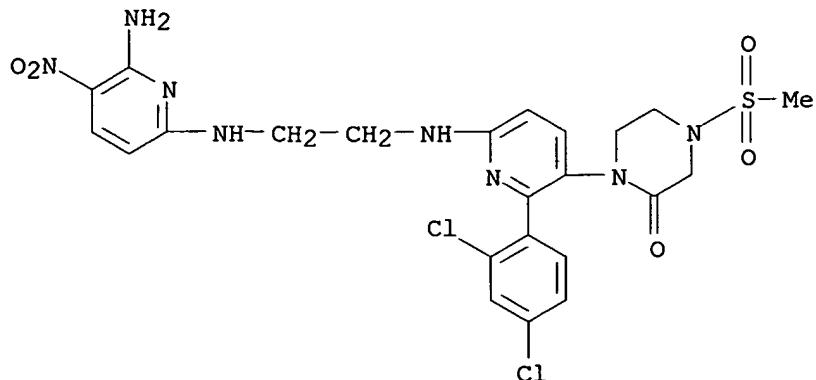
RN 403808-93-5 CAPLUS

CN Pyrrolo[1,2-a]pyrazin-3(4H)-one, 2-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



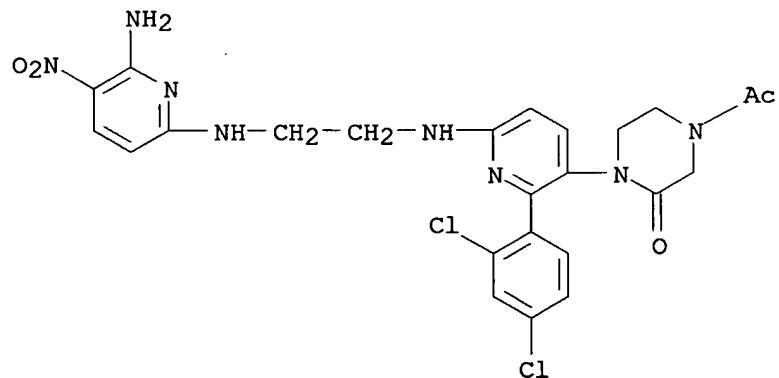
RN 403808-94-6 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)



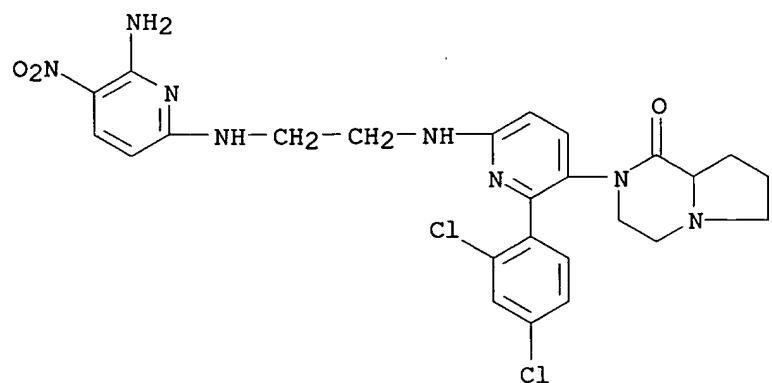
RN 403808-95-7 CAPLUS

CN Piperazinone, 4-acetyl-1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI)  
(CA INDEX NAME)



RN 403808-96-8 CAPLUS

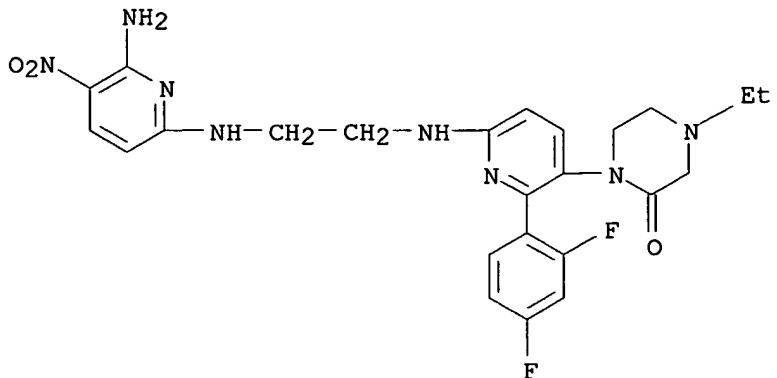
CN Pyrrolo[1,2-a]pyrazin-1(2H)-one, 2-[(6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



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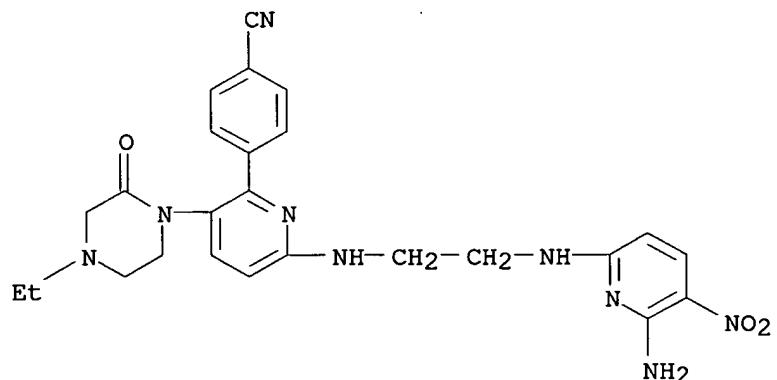
RN 403808-98-0 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



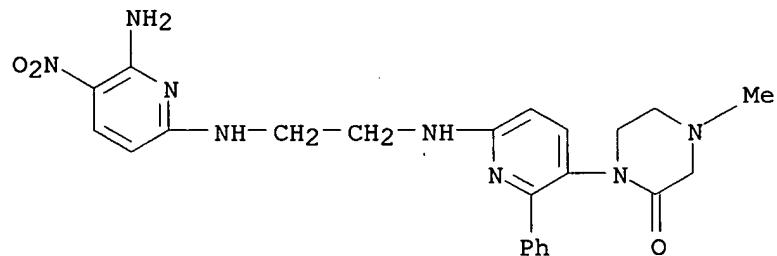
RN 403809-00-7 CAPLUS

CN Benzonitrile, 4-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-3-(4-ethyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 403809-02-9 CAPLUS

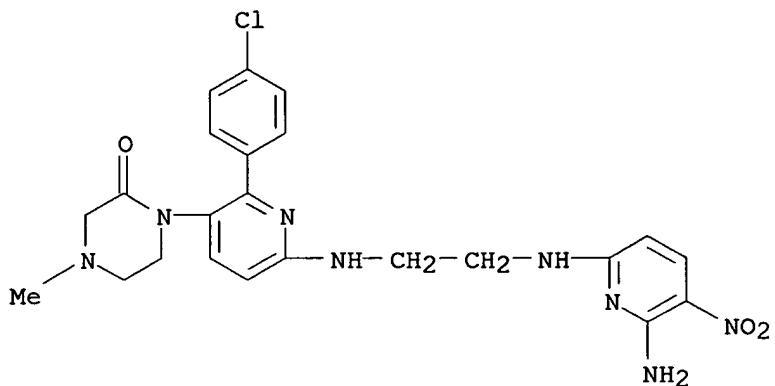
CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-phenyl-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-03-0 CAPLUS

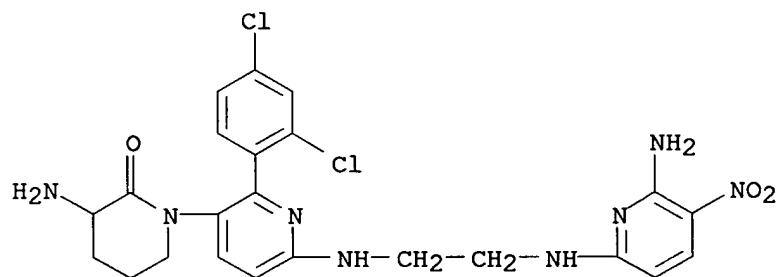
10/690, 671

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



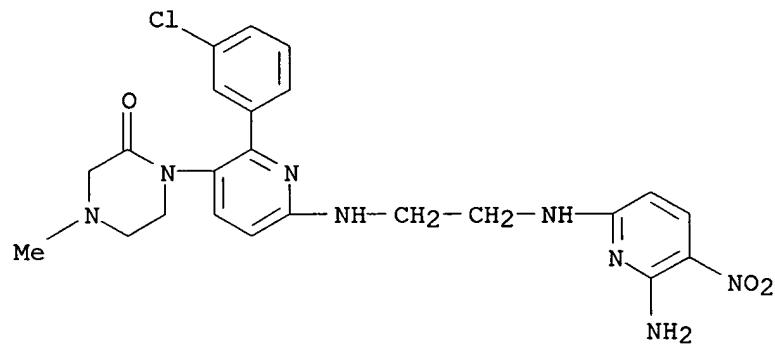
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CN 2-Piperidinone, 3-amino-1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI)  
(CA INDEX NAME)



RN 403809-05-2 CAPLUS

CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(3-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

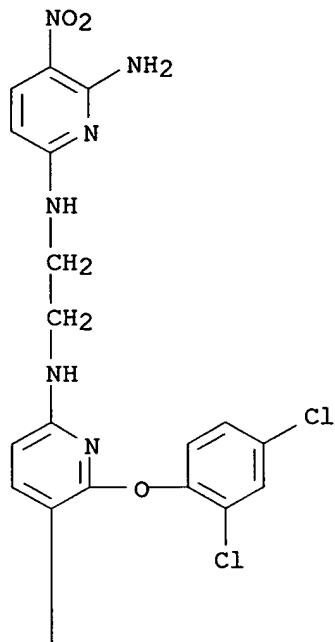


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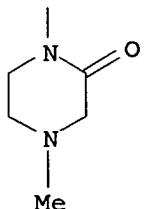
10/690,671

CN    Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenoxy)-3-pyridinyl]-4-methyl- (9CI)    (CA INDEX NAME)

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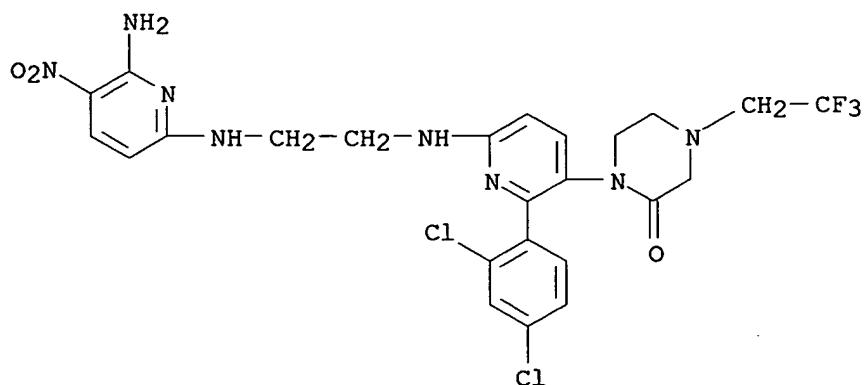


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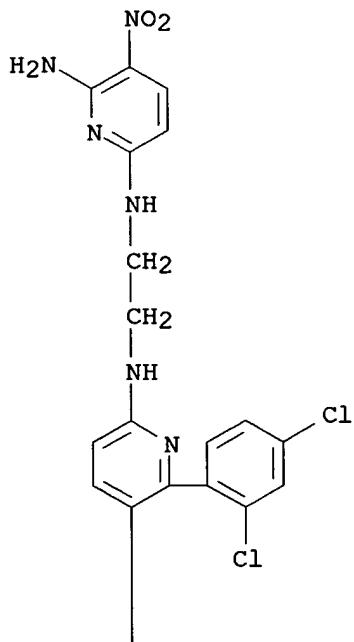
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CN    Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(2,2,2-trifluoroethyl)- (9CI)    (CA INDEX NAME)

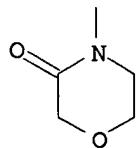


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CN 3-Morpholinone, 4-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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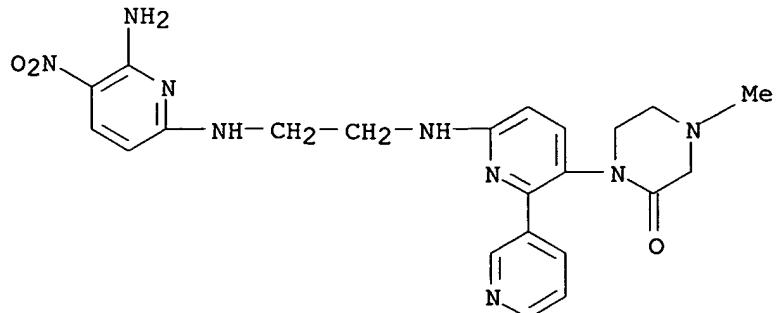
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10/690, 671

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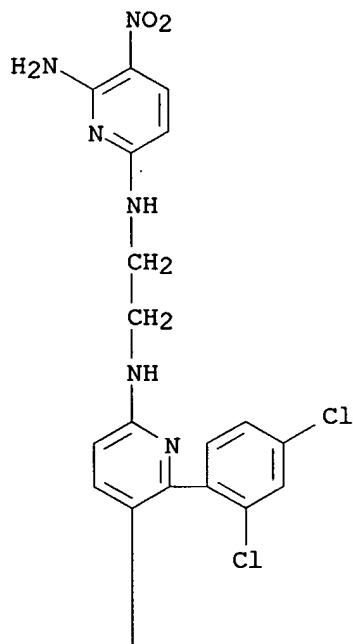
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino][2,3'-bipyridin]-3-yl]-4-methyl- (9CI) (CA INDEX NAME)

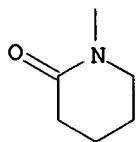


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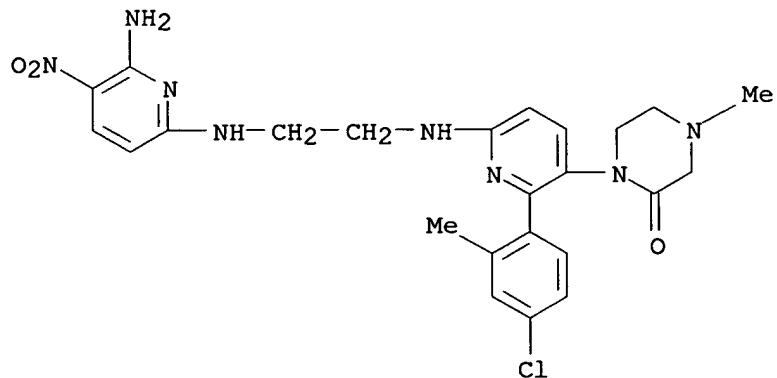
CN 2-Piperidinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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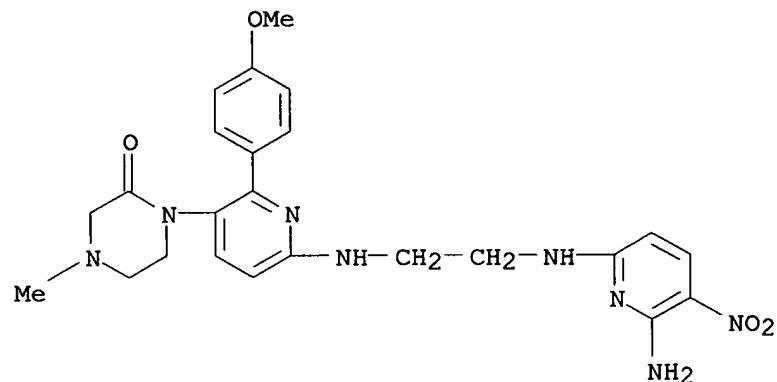




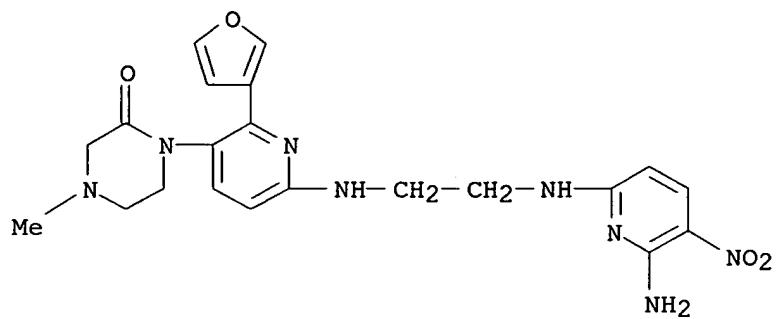
RN 403809-11-0 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-chloro-2-methylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-12-1 CAPLUS  
 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(4-methoxyphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



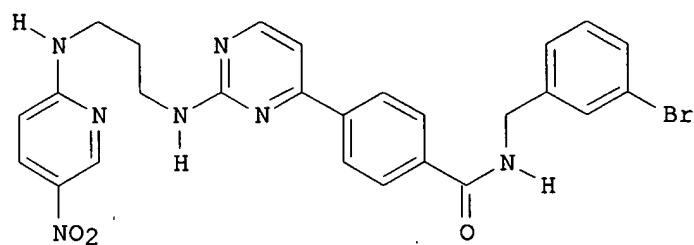
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 CN Piperazinone, 1-[6-[(2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl)amino]-2-(3-furanyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



D13 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:811233 CAPLUS  
 DOCUMENT NUMBER: 132:64265  
 TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors  
 INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Brown, Sean P.; Goff, Dane; Johnson, Kirk; Pfister, Keith B.; Ramurthy, Savithry; Renhowe, Paul A.; Seely, Lynn; Subramanian, Sharadha; Wagman, Allan S.; Zhou, Xiaohui A.  
 PATENT ASSIGNEE(S): Chiron Corporation, USA  
 SOURCE: PCT Int. Appl., 262 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965897	A1	19991223	WO 1999-US13809	19990618
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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OTHER SOURCE(S): MARPAT 132:64265  
GI



II

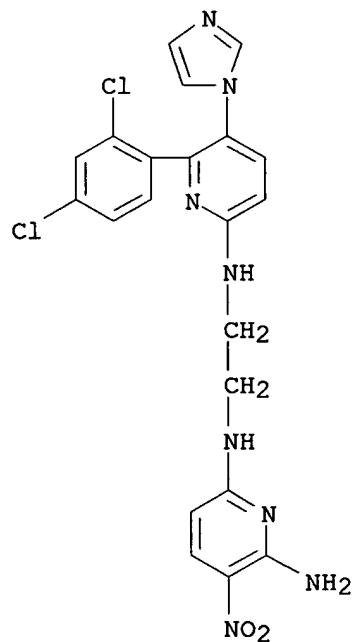
AB RZCR2R12CR3R13Z1R5 [I; R = (un)substituted (hetero)aryl; Z = O, NR1, CR1R11; Z1 = O, NR4, CR4R14; R1-R4 = H, OH, NH<sub>2</sub>, alkyl, alkoxy, etc.; R5 = (un)substituted 2-pyridyl or -pyrimidyl; R11-R14 = H or alkyl] were prepared. Thus, 2-chloro-5-nitropyridine was aminated by H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine which was cyclocondensed with resin-bound 4-(MeCO)C<sub>6</sub>H<sub>4</sub>CONHCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Br-3 and Cs<sub>2</sub>CO<sub>3</sub> to give, after resin cleavage, title compound II. Data for biol. activity of I were given.

IT 252917-05-8P 252936-05-3P 252938-13-9P  
 252942-25-9P 252942-26-0P 252942-30-6P  
 252942-34-0P 252942-35-1P 252942-37-3P  
 252942-38-4P 252942-39-5P 252942-40-8P  
 252942-41-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

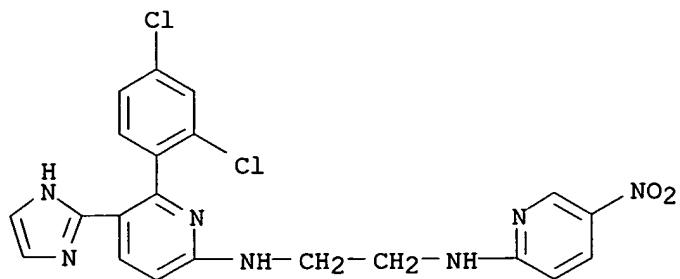
RN 252917-05-8 CAPLUS

CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



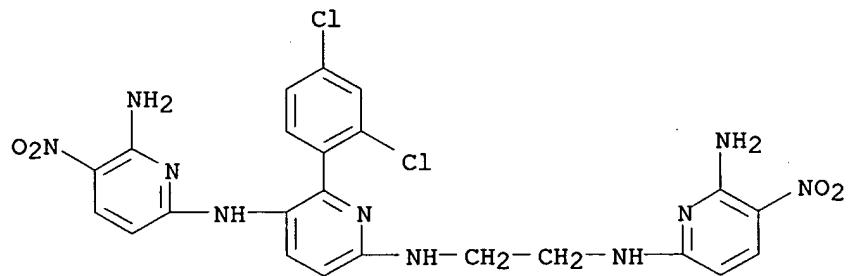
RN 252936-05-3 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



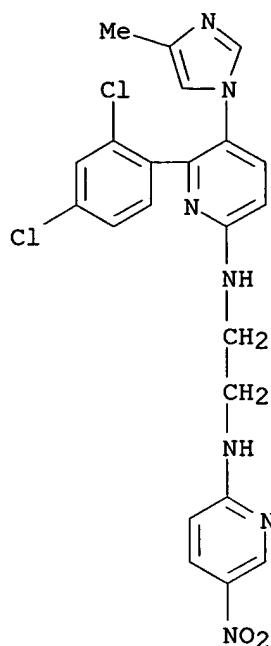
RN 252938-13-9 CAPLUS

CN 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



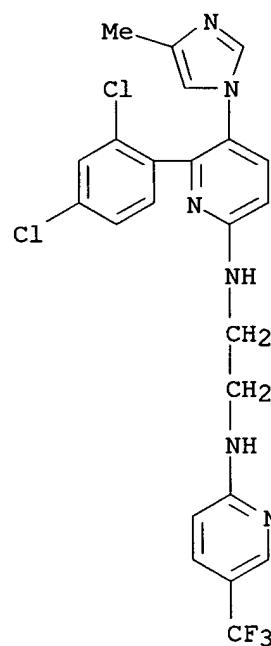
RN 252942-25-9 CAPLUS

CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-26-0 CAPLUS

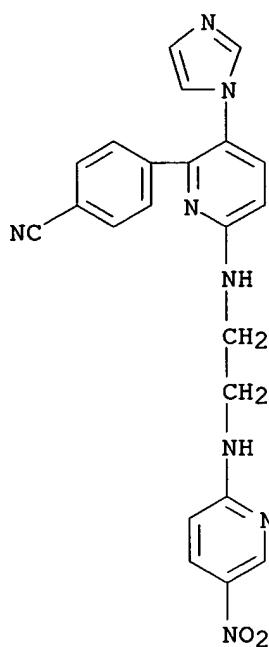
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-30-6 CAPLUS

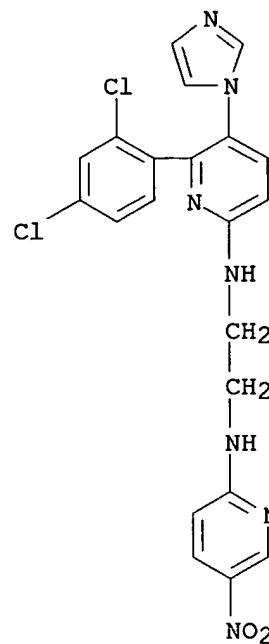
CN Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-

pyridinyl)amino]ethyl]amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-34-0 CAPLUS

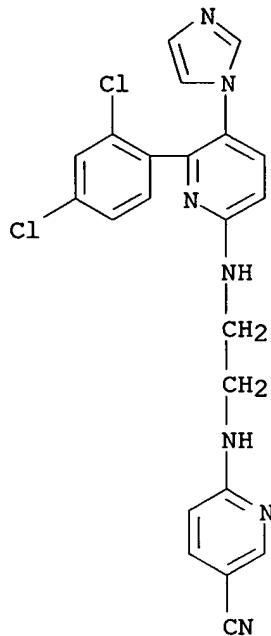
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



10/690, 671

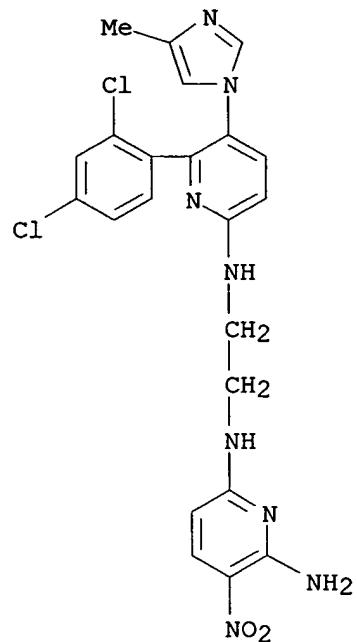
RN 252942-35-1 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

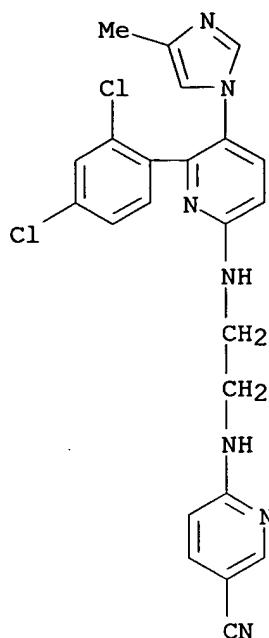


RN 252942-37-3 CAPLUS

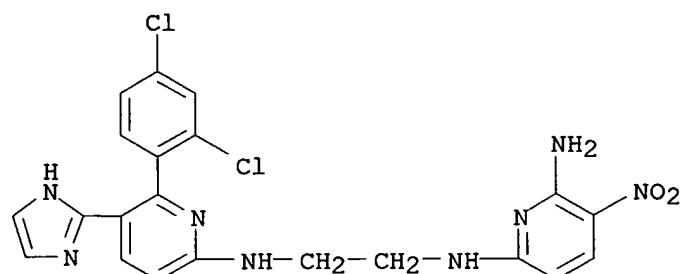
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



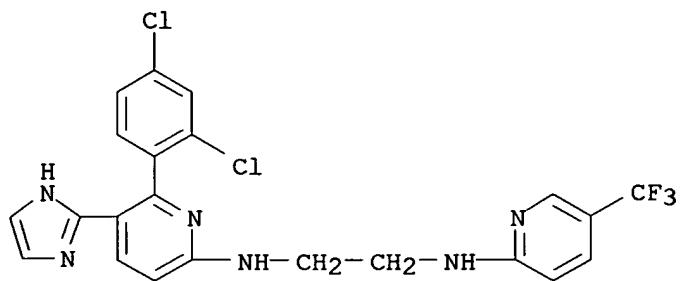
RN 252942-38-4 CAPLUS  
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 252942-39-5 CAPLUS  
CN 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

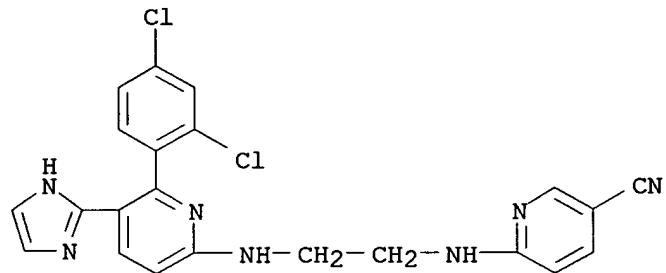


RN 252942-40-8 CAPLUS  
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-(trifluoromethyl)-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-41-9 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

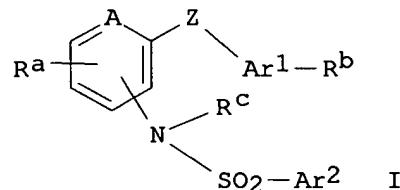
5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,671

L13 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:640827 CAPLUS  
DOCUMENT NUMBER: 131:267057  
TITLE: Sulfonamide derivatives and drugs containing the same  
as the active ingredient  
INVENTOR(S): Hidaka, Hiroyoshi; Inoue, Tsutomu; Umezawa, Isao;  
Nakano, Hiroyuki; Nakamura, Hiroshi; Watanabe,  
Naofumi; Yokota, Shizumasa; Sasaki, Tomomitsu; Yajima,  
Yumi  
PATENT ASSIGNEE(S): Japan  
SOURCE: PCT Int. Appl., 103 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950237	A1	19991007	WO 1999-JP1621	19990330
W: CA, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 11279138	A2	19991012	JP 1998-83804	19980330
CA 2325997	AA	19991007	CA 1999-2325997	19990330
EP 1072587	A1	20010131	EP 1999-910769	19990330
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE US 6403607	B1	20020611	US 2000-647533 JP 1998-83804 WO 1999-JP1621	20001002 A 19980330 W 19990330
PRIORITY APPLN. INFO.:				
OTHER SOURCE(S): GI	MARPAT	131:267057		



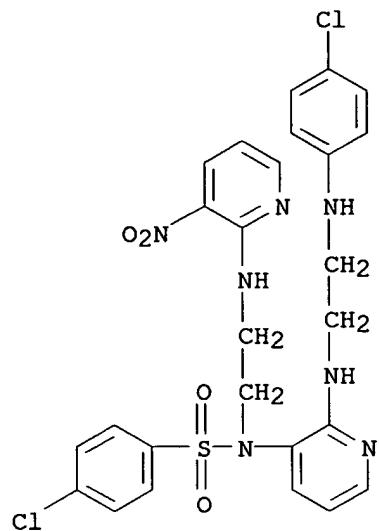
AB Sulfonamide derivs. represented by general formula (I) or salts thereof, wherein A represents nitrogen, -CH=, etc.; Z represents oxygen, etc.; Ar1 represents aryl, etc.; Ar2 represents alkyl, etc.; Ra represents hydrogen, etc.; Rb represents halogeno, etc.; and Rc represents alkyl, etc. Because of having radical-scavenging effect, gastric secretion-potentiating effect, anti-HP bacterial effect, etc., these compds. are useful as remedies for peptic ulcer.

IT 245649-33-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(sulfonamide derivs. and antiulcer drugs containing the same as the active ingredient)

RN 245649-33-6 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[2-[(2-[(4-chlorophenyl)amino]ethyl]amino]-3-pyridinyl]-N-[2-[(3-nitro-2-pyridinyl)amino]ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

26

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

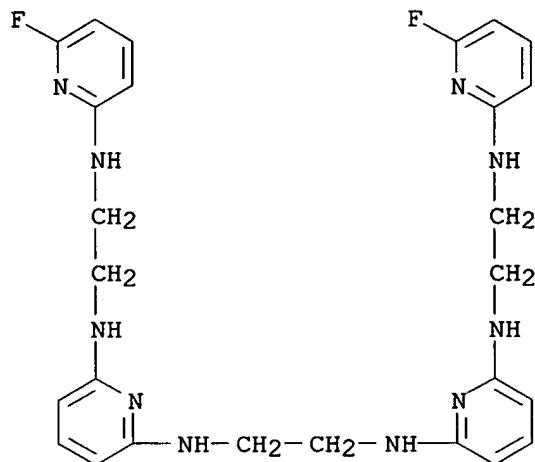
L13 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1998:49517 CAPLUS  
DOCUMENT NUMBER: 128:180392  
TITLE: Linear and macrocyclic ligands containing alternating pyridine and imidazolidin-2-one units  
AUTHOR(S): Meth-Cohn, Otto; Yan, Zegui  
CORPORATE SOURCE: Chemistry Department, Sunderland University, Sunderland, SR1 3SD, UK  
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1998), (3), 423-436  
CODEN: JCPRB4; ISSN: 0300-922X  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Linear oligomers of alternating 2,6-disubstituted pyridine (P) and N,N'-disubstituted imidazolidine-2-one units (I) with up to nine repeating units, terminating in either pyridine or imidazolidin-2-one units, or one of each, were made rapidly and in high yield. Synthetic methods include: the sodium hydride-mediated condensation of N-(tert-butyl)imidazolidin-2-one with 2,6-difluoropyridine (F-P-F) or with higher analogs such as F-PIP-F, to give IPI, IPIPI and IPIPIPI. The tert-Bu protective group was readily and quant. removed with acid. Another synthetic method comprises the cesium fluoride catalyzed interaction of N,N'-(dimethyl-(1,1,3-trimethylpropyl))-protected IPI with tert-Bu-IP-F; it sequentially leads first to IPIPIPI which by the same method reacts with F-P-F to give F-PIPIPIPIP-F. F-P-F also reacts with 1,2-ethylenediamine (E) sequentially to give F-PEP-F, EPEPE and F-PEPEPEP-F while similar reactions starting from F-PIP-F give EPIPE and F-PEPIPEP-F in sequence. Alternative routes examined were the interaction of F-P-F with imidazole to give 2,6-bis(imidazol-1-yl)pyridine and salts therefrom followed by (unsuccessful) oxidation and the reaction of 2,6-diaminopyridine with 2-chloroethyl isocyanate followed by cyclization to give IPI. The interaction of 2,6-diaminopyridine with oxalate esters (O) gave OPO or H<sub>2</sub>N-POP-NH<sub>2</sub>, the latter of which was reduced to H<sub>2</sub>N-PEP-NH<sub>2</sub>. Cyclization of the linear assemblies was not successful. However macrocyclic systems were made by linking two IPI units with two ethoxyethyl or with two ethoxyethoxyethyl units. Also two F-PIP-F units were similarly reacted to give polyether-linked macrocycles. Mono- and bis-prop-2-ynylated IPI derivs. were made but could not be cyclized. Attempts to cyclize ethylenediamine and oxamide based systems were also unsuccessful. The linear and macrocyclic ligands showed calcium selectivity in a study of their metal complexing abilities.

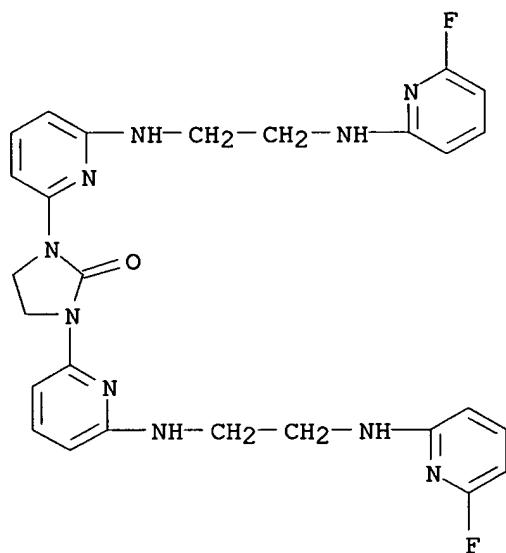
IT 203303-23-5P 203303-25-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of linear and macrocyclic ligands containing alternating pyridine  
and imidazolidinone units)

RN 203303-23-5 CAPLUS

CN 2,6-Pyridinediamine, N,N''-1,2-ethanediylbis[N'-(2-[(6-fluoro-2-pyridinyl)amino]ethyl)]- (9CI) (CA INDEX NAME)



RN 203303-25-7 CAPLUS  
CN 1,2-Ethanediamine, N,N''-[ (2-oxo-1,3-imidazolidinediyl)di-6,2-pyridinediyl]bis[N'-(6-fluoro-2-pyridinyl)-] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~143~~ ANSWER 16 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1996:618987 CAPLUS

DOCUMENT NUMBER: 125:328464

TITLE: The Synthesis of Aminopyridines: A Method Employing  
Palladium-Catalyzed Carbon-Nitrogen Bond Formation  
Wagaw, Seble; Buchwald, Stephen L.

AUTHOR(S): Wagaw, Seble; Buchwald, Stephen L.  
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of  
Technology, Cambridge, MA, 02139, USA

SOURCE: Journal of Organic Chemistry (1996), 61(21), 7240-7241  
CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:328464

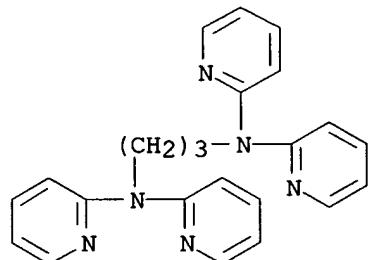
AB Aminopyridines are efficiently synthesized under mild conditions by the cross coupling reaction of 2-, 3-, and 4-bromopyridines with primary and secondary amines utilizing palladium(0) complexes with chelating bis(phosphine) ligands. A variety of aminopyridines were prepared including mono-, di-, tri-, and tetra-pyridinylated products.

IT 183135-56-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of aminopyridines by palladium-catalyzed cross coupling of bromopyridines with amines)

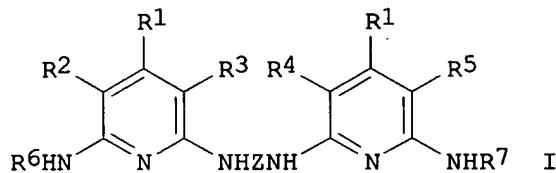
RN 183135-56-0 CAPLUS

CN 1,3-Propanediamine, N,N,N',N'-tetra-2-pyridinyl- (9CI) (CA INDEX NAME)



D13 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:693193 CAPLUS  
 DOCUMENT NUMBER: 123:115325  
 TITLE: Reactive azo dye mixtures and their use  
 INVENTOR(S): Tzikas, Athanassios; Carisch, Claudia  
 PATENT ASSIGNEE(S): Ciba-Geigy Corp., USA  
 SOURCE: U.S., 21 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5393306	A	19950228	US 1993-94644	19930719
			US 1993-94644	19930719
PRIORITY APPLN. INFO.:				
OTHER SOURCE(S):	MARPAT	123:115325		
GI				



AB Mixts. of dye isomers I [R1 = C1-4 alkyl; R2 or R3, R4 or R5 = CN, CONH2, CH2SO3H; R2 or R3, R4 or R5 = N:NX; R6, R7 = H, (un)substituted C1-12 alkyl; X = residue of a diazo component or amino azo compound having a fiber-reactive substituent; Z = (un)substituted and (un)interrupted by O C2-12 alkylene] (II) are particularly suitable for dyeing or printing cellulosic fiber materials or natural or synthetic polyamide fiber materials with a high tinctorial yield, and produce dyeings and prints having good fastness properties. Thus, 1:1 condensation of 2,6-dichloro-3-cyano-4-methylpyridine with HOCH2CH2NH2 gave a 3:1 mixture of 6- and 2-hydroxyethylamino isomers, which was condensed with H2N(CH2)3NH2 to give a 60:35:5 mixture in which the predominant isomer was I [R1 = Me, R2 = R5 = H, R3 = R4 = CN, R6 = R7 = CH2CH2OH, Z = (CH2)3]. The analogous mixture with Z = (CH2)2 was coupled with diazotized 2,4-H2N(HO3S)C6H3SO2CH2CH2OSO3H to give a II mixture which dyed cotton and wool in fast brilliant orange shades.

IT 154196-45-9P 154196-46-0P 154196-47-1P  
 155952-36-6P 155952-37-7P 155952-38-8P  
 155952-44-6P 155952-45-7P 155952-46-8P  
 RL: IMF (Industrial manufacture); PREP (Preparation)

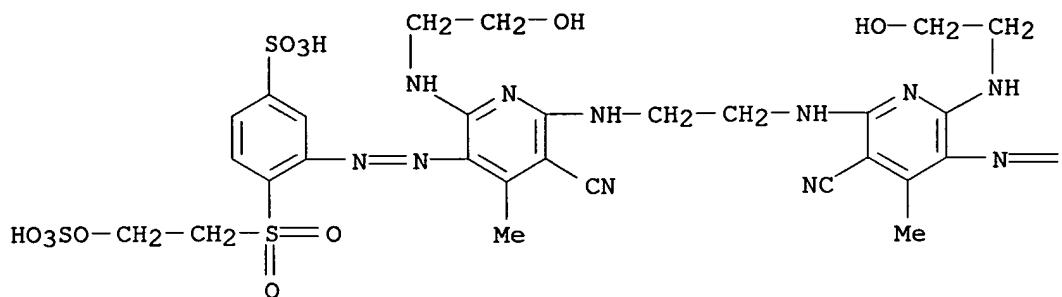
(mixts. containing, orange; preparation of reactive azo dye mixts. for cotton

and wool)

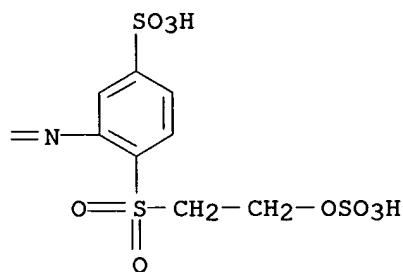
RN 154196-45-9 CAPLUS

CN Benzenesulfonic acid, 3,3'-(1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[[2-(sulfoxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

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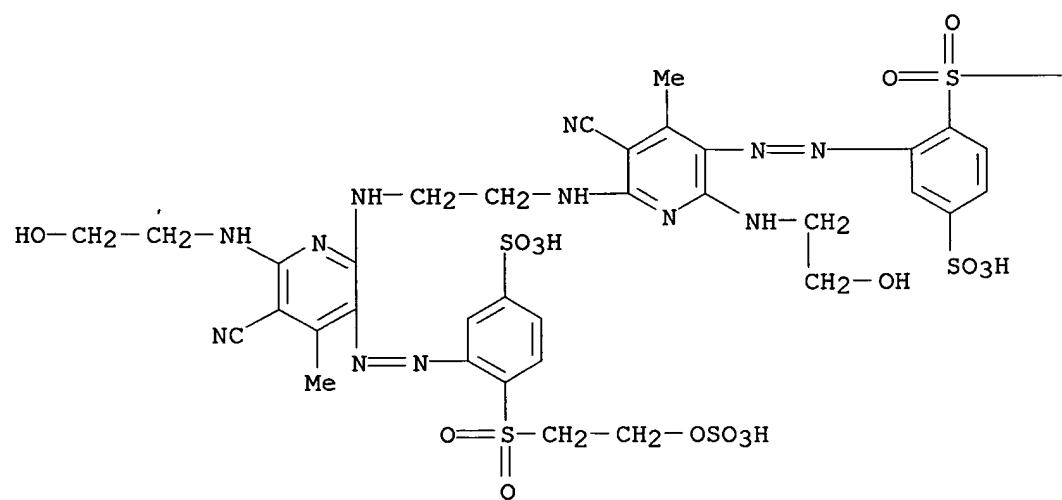
PAGE 1-B



RN 154196-46-0 CAPLUS

CN Benzenesulfonic acid, 3-[[5-cyano-6-[[2-[[5-cyano-6-[[(2-hydroxyethyl)amino]-4-methyl-3-[[5-sulfo-2-[(2-sulfooxy)ethyl]sulfonyl]phenyl]azo]-2-pyridinyl]amino]ethyl]amino]-2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

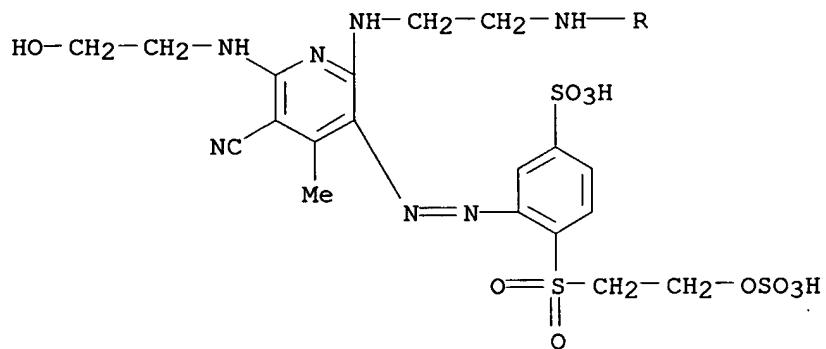
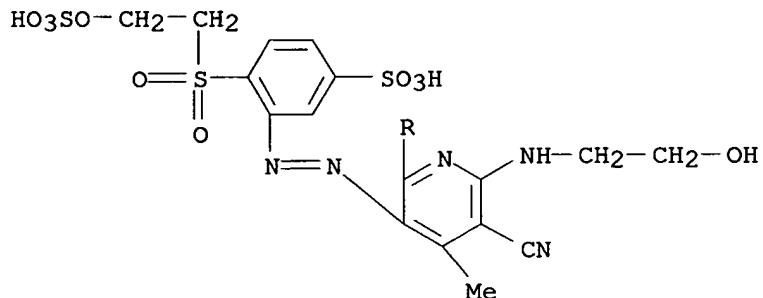
PAGE 1-A



— CH<sub>2</sub>—CH<sub>2</sub>—OSO<sub>3</sub>H

RN 154196-47-1 CAPLUS

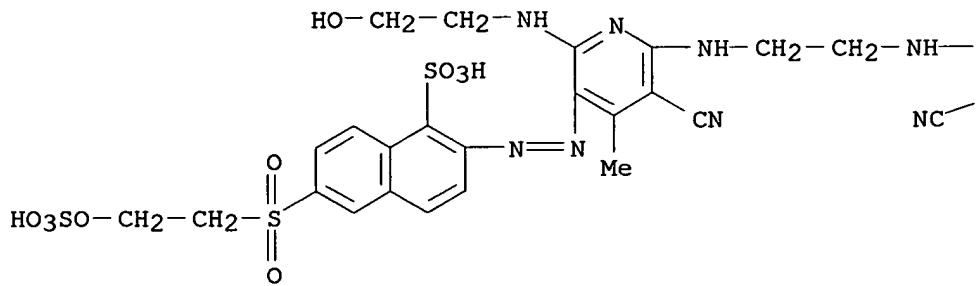
CN Benzenesulfonic acid, 3,3'—[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[4-[[2-(sulfooxy)ethyl]sulfonyl]— (9CI) (CA INDEX NAME)



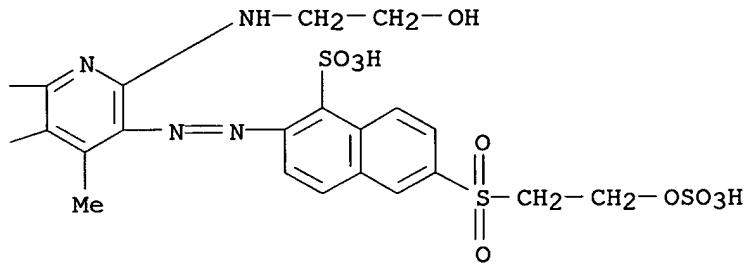
RN 155952-36-6 CAPLUS

CN 1-Naphthalenesulfonic acid, 2,2'—[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]— (9CI) (CA INDEX NAME)

PAGE 1-A



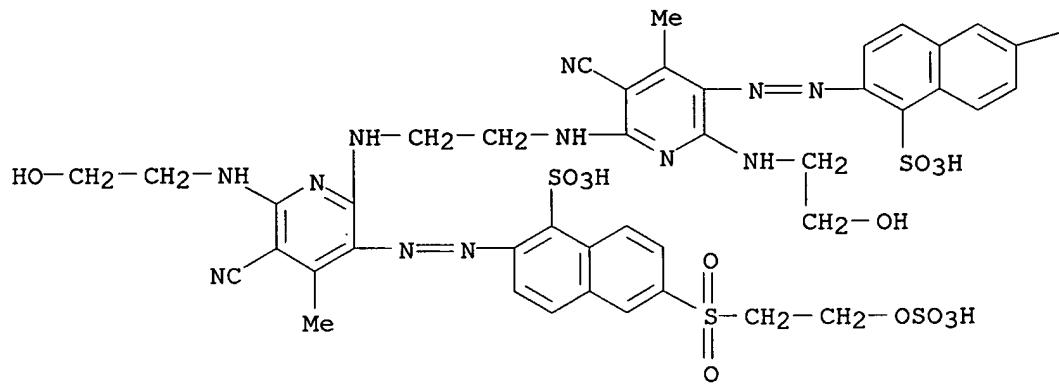
PAGE 1-B



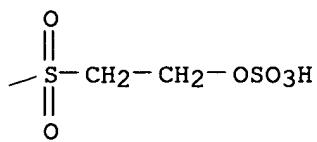
RN 155952-37-7 CAPLUS

CN 1-Naphthalenesulfonic acid, 2-[[5-cyano-2-[[2-[[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-5-[[1-sulfo-6-[[2-(sulfooxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-6-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

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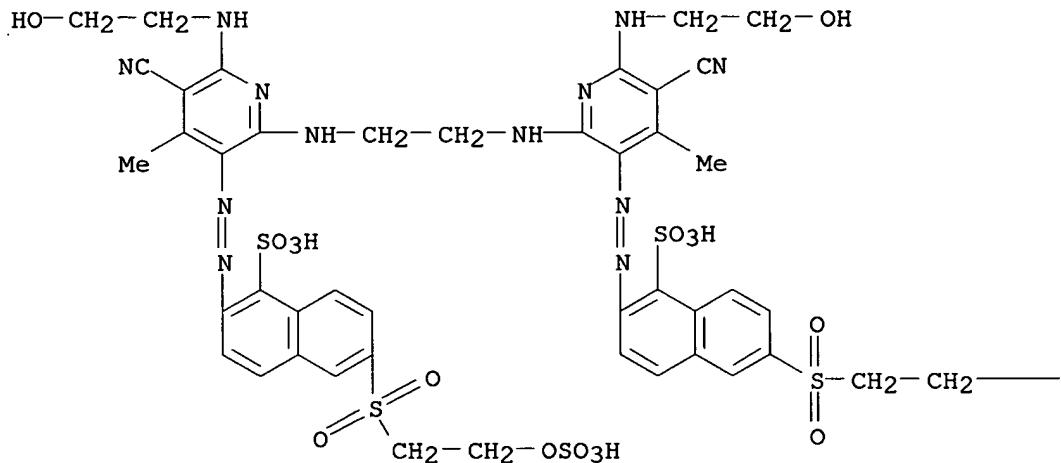
PAGE 1-B



RN 155952-38-8 CAPLUS

CN 1-Naphthalenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[6-[[2-(sulfooxyethyl)sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



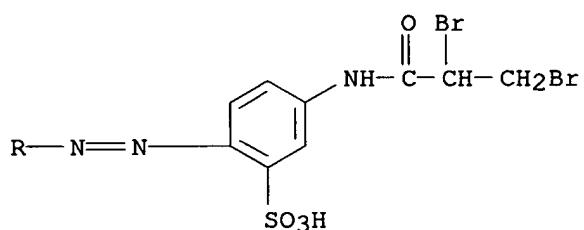
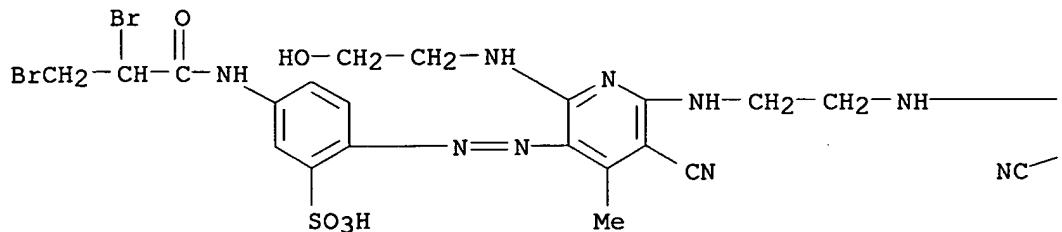
PAGE 1-B

— OSO<sub>3</sub>H

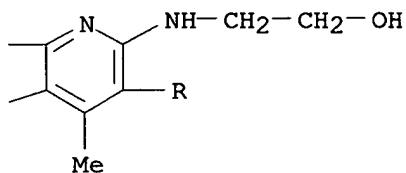
RN 155952-44-6 CAPLUS

CN Benzenesulfonic acid, 2,2'-(1,2-ethanediylbis(imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo))bis[5-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

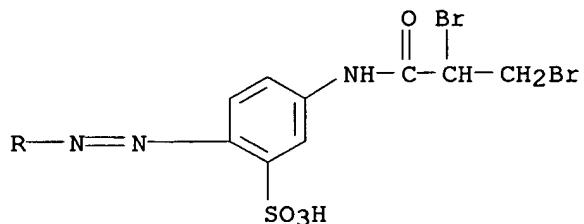
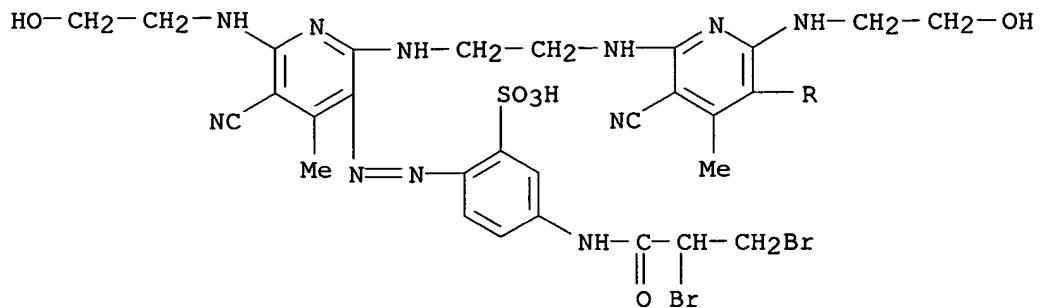


PAGE 1-B



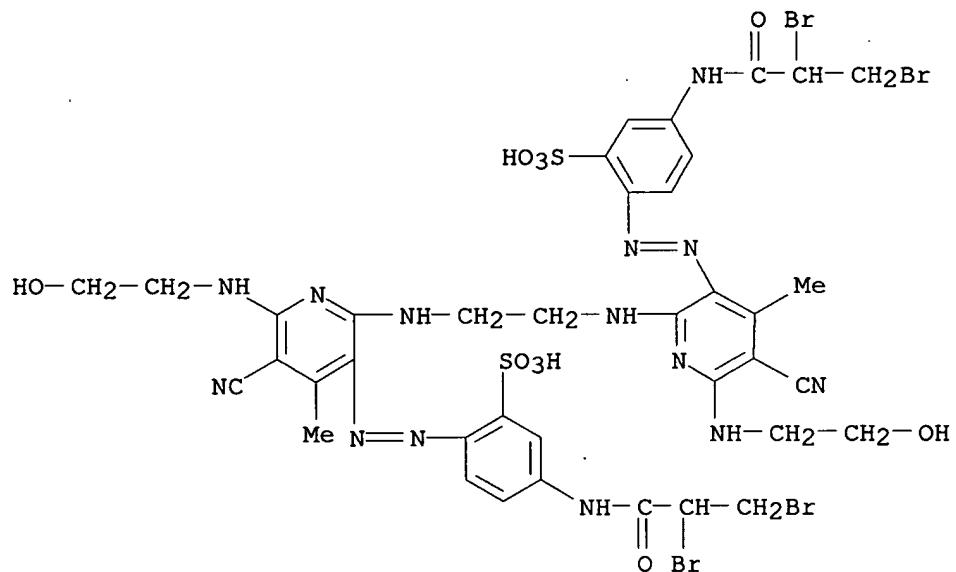
RN 155952-45-7 CAPLUS

CN Benzenesulfonic acid, 2-[[5-cyano-2-[[2-[[3-cyano-5-[(4-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-5-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)



RN 155952-46-8 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)



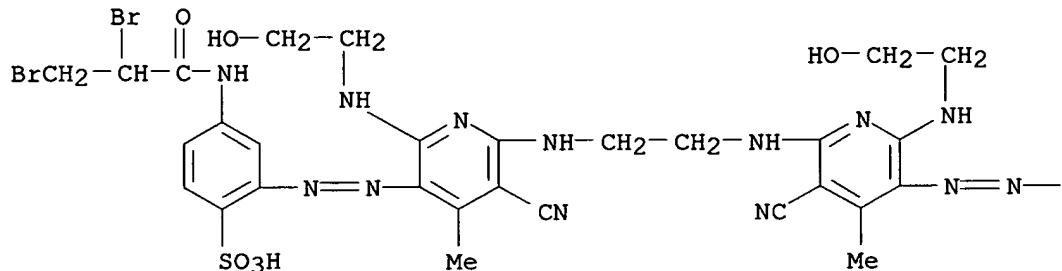
IT 155952-40-2P 155952-41-3P 155952-42-4P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (mixts. containing, yellow; preparation of reactive azo dye mixts. for  
 cotton  
 and wool)

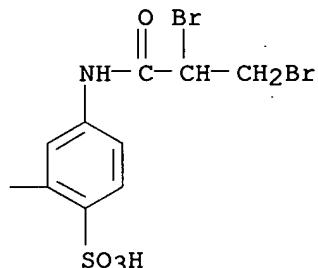
RN 155952-40-2 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



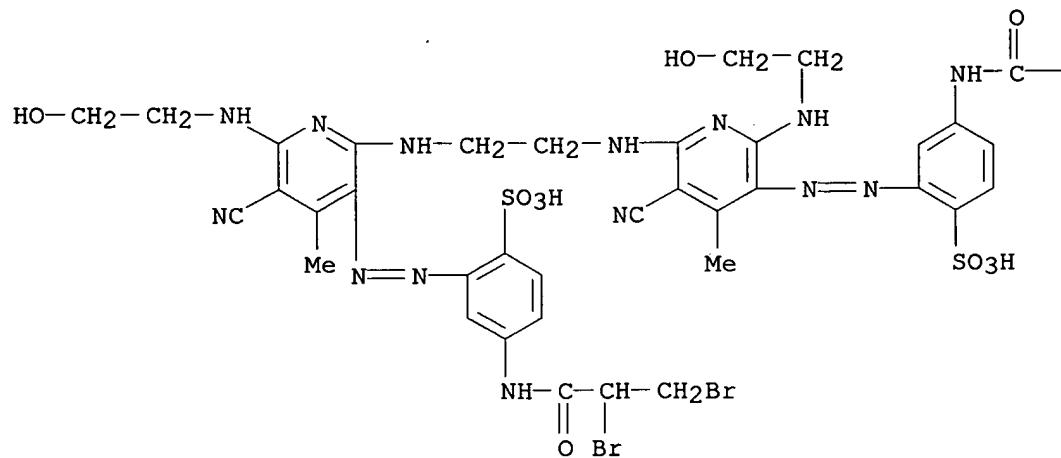
PAGE 1-B

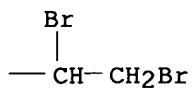


RN 155952-41-3 CAPLUS

CN Benzenesulfonic acid, 2-[[5-cyano-2-[[2-[[3-cyano-5-[[5-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)

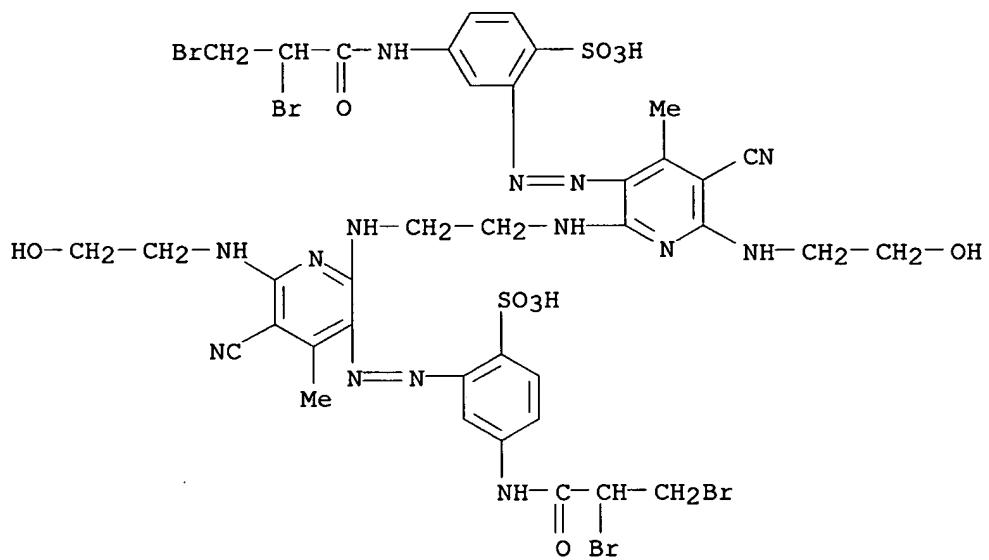
PAGE 1-A





RN 155952-42-4 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]bis[4-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)



X13 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1995:252910 CAPLUS  
DOCUMENT NUMBER: 122:226468  
TITLE: Photophysical properties of monomeric and oligomeric ruthenium(II) porphyrins  
AUTHOR(S): Ikonen, Marjo; Guez, David; Marvaud, Valerie; Markovitsi, Dimitra  
CORPORATE SOURCE: Laboratoire de Photophysique et Photochimie, CEA-CNRS URA 331, Centre d'Etudes de Saclay, Gif-sur-Yvette, 91191, Fr.  
SOURCE: Chemical Physics Letters (1994), 231(1), 93-7  
CODEN: CHPLBC; ISSN: 0009-2614  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The present Letter deals with three ruthenium(II) porphyrins: RuTBP(CO)(EtOH), RuTBP(pyz)<sub>n</sub> and [RuTBP(pyz)]<sub>n</sub>, where TBP = tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin, EtOH = ethanol and pyz = pyrazine. Their photophys. properties are studied by steady-state and time-resolved absorption and emission spectroscopy. Each one of the examined compds. shows weak luminescence originating from a different electronic state: porphyrin triplet 3(π,π\*) for RuTBP(CO)(EtOH), equatorial 3MLCT for RuTBP(pyz)<sub>2</sub> and axial 1MLCT for [RuTBP(pyz)]<sub>n</sub>.

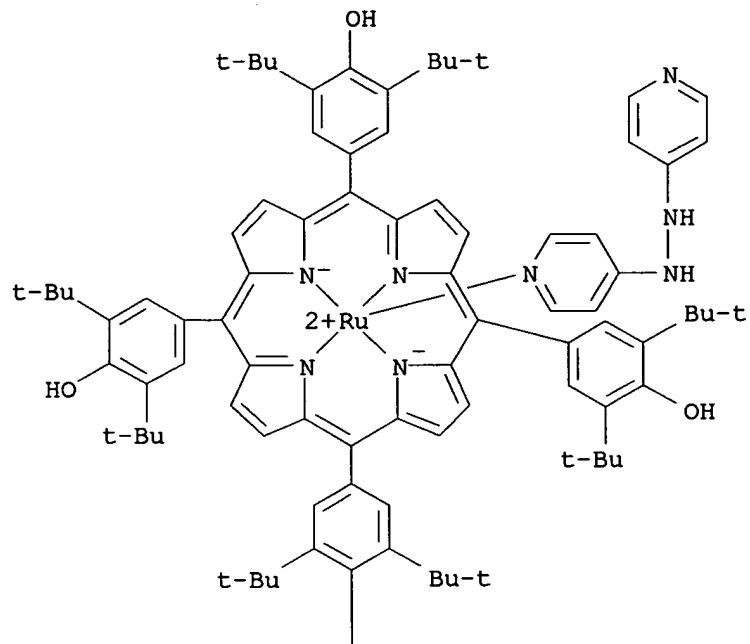
IT 143849-72-3

RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
PROC (Process)  
(steady-state and time-resolved absorption and emission spectroscopy  
study of photophys. properties of)

RN 143849-72-3 CAPLUS

CN Ruthenium, [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

PAGE 1-A



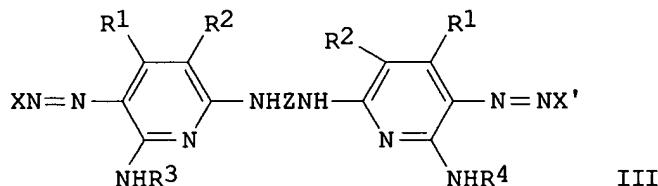
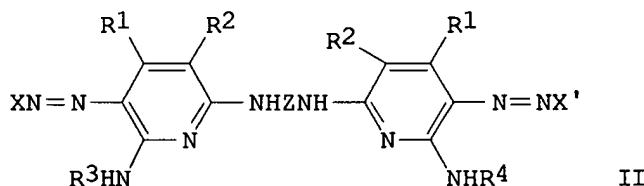
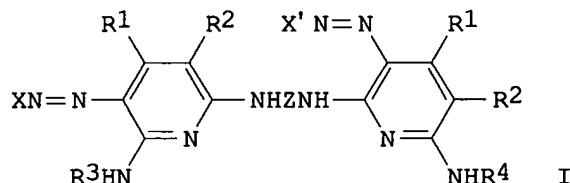
PAGE 2-A



~~10/690,671~~

LAS3 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1994:485708 CAPLUS  
DOCUMENT NUMBER: 121:85708  
TITLE: Mixtures of pyridine disazo reactive dyes, their manufacture and their use  
INVENTOR(S): Tzikas, Athanassios; Carisch, Claudia  
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
SOURCE: Eur. Pat. Appl., 31 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 581732	A2	19940202	EP 1993-810506	19930714
EP 581732	A3	19941012		
EP 581732	B1	20000503		
R: BE, CH, DE, ES, FR, GB, IT, LI, PT ES 2146221 PT 581732 JP 06179833 JP 3576187	T3 T A2 B2	20000801 20001031 19940628 20041013	ES 1993-810506 PT 1993-810506 JP 1993-181294	19930714 19930714 19930722
PRIORITY APPLN. INFO.:			CH 1992-2350	A 19920723
OTHER SOURCE(S):	MARPAT	121:85708		
GI				



AB Mixts. of I with II and(or) III (R1 = C1-4-alkyl; R2 = CN, carbamoyl, sulfomethyl; R3, R4 = H, optionally substituted alkyl; X, X' = diazo component; Z = optionally substituted alkylene) containing  $\geq 1$  reactive group are obtained for dyeing and printing of cellulosics and natural or

synthetic polyamides. I-III provide fast dyeings. Thus, 3-amino-4-(2-sulfatoethylsulfonyl)benzenesulfonic acid was diazotized and coupled with a mixture of 3 ethylenediaminodipyridines obtained from 2,6-dichloro-3-cyano-4-methylpyridine, ethanolamine, and ethylenediamine to give a tricomponent dye mixture, brilliant orange on cotton and wool.

IT 155952-49-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(coupling of, with diazotized amino(sulfatoethylsulfonyl)benzenesulfonic acid)

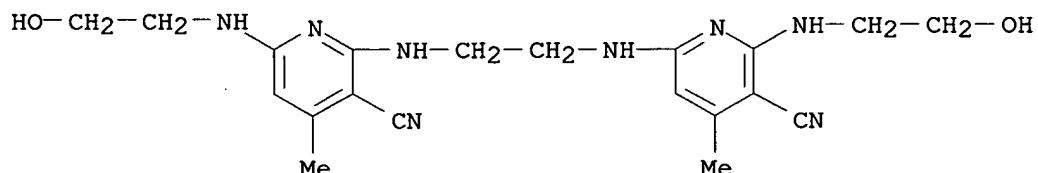
RN 155952-49-1 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-(1,2-ethanediylidimino)bis[6-[(2-hydroxyethyl)amino]-4-methyl-, mixt. with 2-[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile and 6,6'-(1,2-ethanediylidimino)bis[2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile] (9CI) (CA INDEX NAME)

CM 1

CRN 155952-48-0

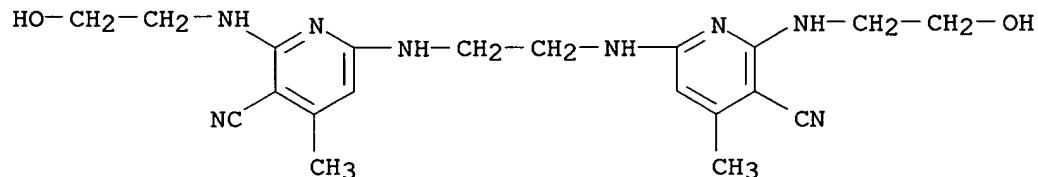
CMF C20 H26 N8 O2



CM 2

CRN 145520-90-7

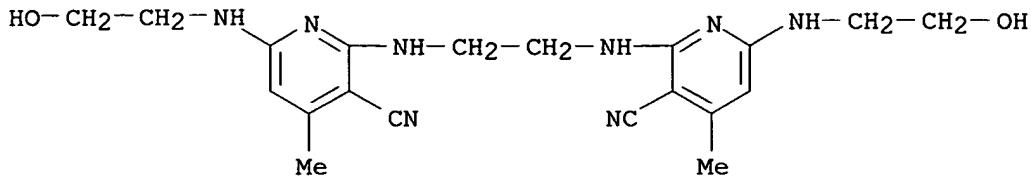
CMF C20 H26 N8 O2



CM 3

CRN 88183-48-6

CMF C20 H26 N8 O2



IT 155952-35-5P 155952-39-9P 155952-43-5P

155952-47-9P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of, as reactive dye for cotton and wool)

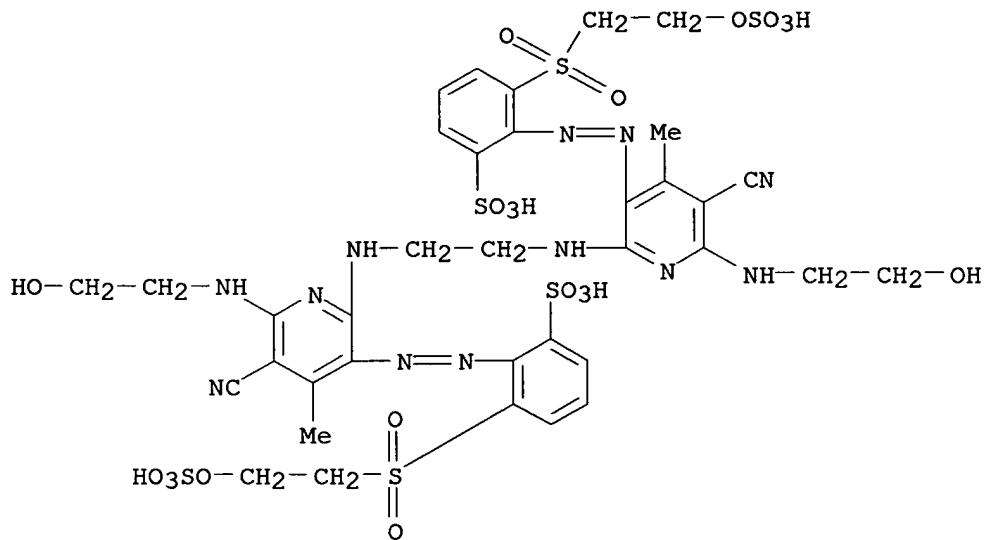
RN 155952-35-5 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[3-[[2-(sulfooxyethyl)sulfonyl]-, mixt. with 3-[[5-cyano-6-[[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-3-[[5-sulfo-2-[[2-(sulfooxyethyl)sulfonyl]phenyl]azo]-2-pyridinyl]amino]ethyl]amino]-2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[[2-(sulfooxyethyl)sulfonyl]benzenesulfonic acid and 3,3'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[[2-(sulfooxyethyl)sulfonyl]benzenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

CRN 155952-34-4

CMF C36 H42 N12 O20 S6

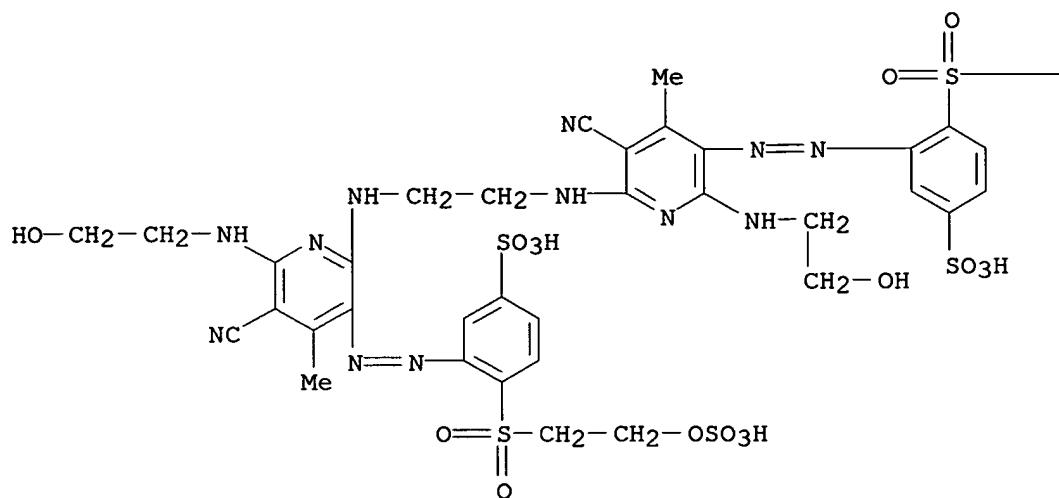


CM 2

CRN 154196-46-0

CMF C36 H42 N12 O20 S6

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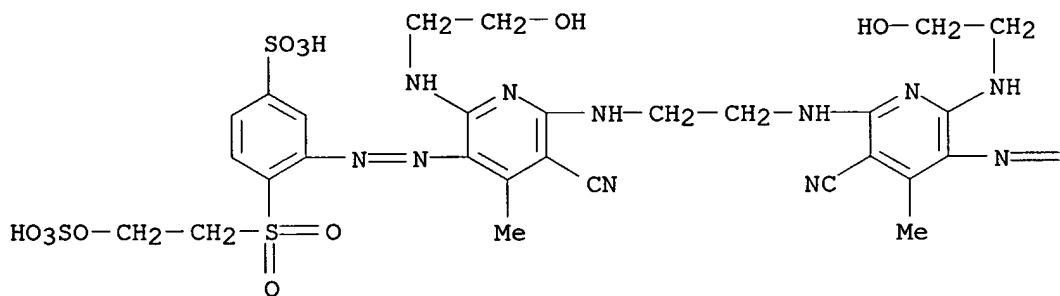
PAGE 1-B

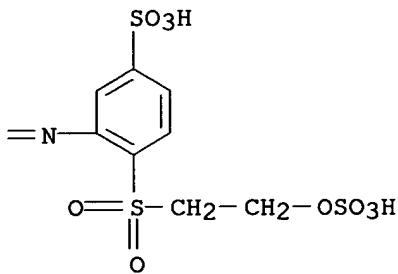
 $\text{---CH}_2\text{---CH}_2\text{---OSO}_3\text{H}$ 

CM 3

CRN 154196-45-9  
 CMF C36 H42 N12 O20 S6

PAGE 1-A





RN 155952-39-9 CAPLUS

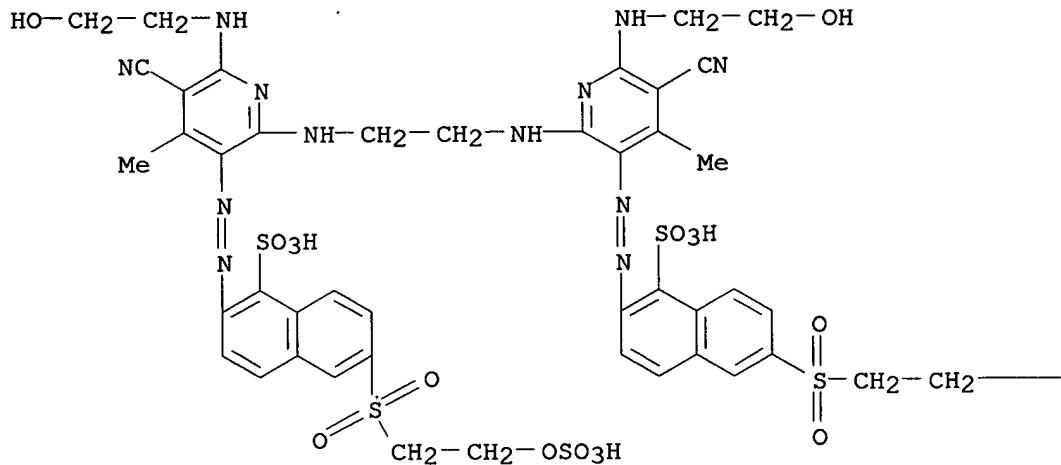
CN 1-Naphthalenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]-, mixt. with 2-[[5-cyano-2-[[2-[[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-5-[[1-sulfo-6-[[2-(sulfooxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-6-[[2-(sulfooxy)ethyl]sulfonyl]-1-naphthalenesulfonic acid and 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]-1-naphthalenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

CRN 155952-38-8

CMF C44 H46 N12 O20 S6

PAGE 1-A



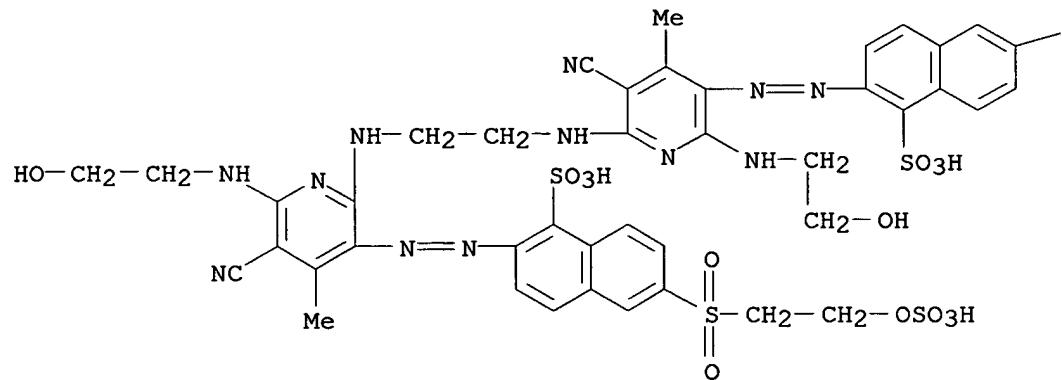
PAGE 1-B

— OSO<sub>3</sub>H

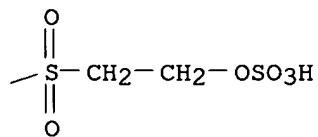
CM 2

CRN 155952-37-7  
CMF C44 H46 N12 O20 S6

PAGE 1-A



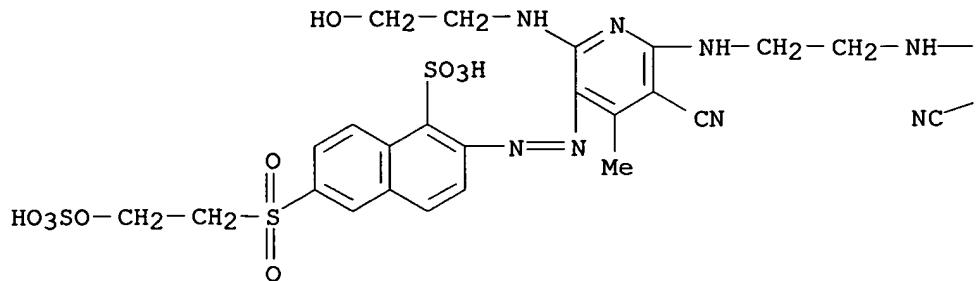
PAGE 1-B



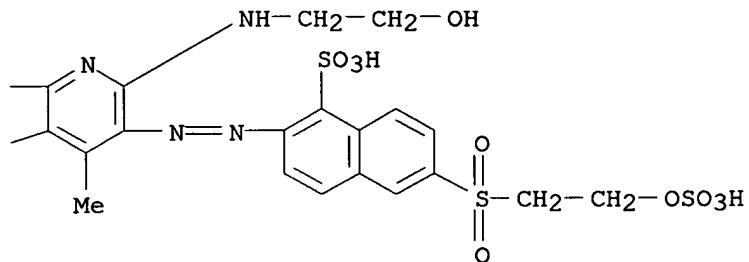
CM 3

CRN 155952-36-6  
CMF C44 H46 N12 O20 S6

PAGE 1-A



PAGE 1-B



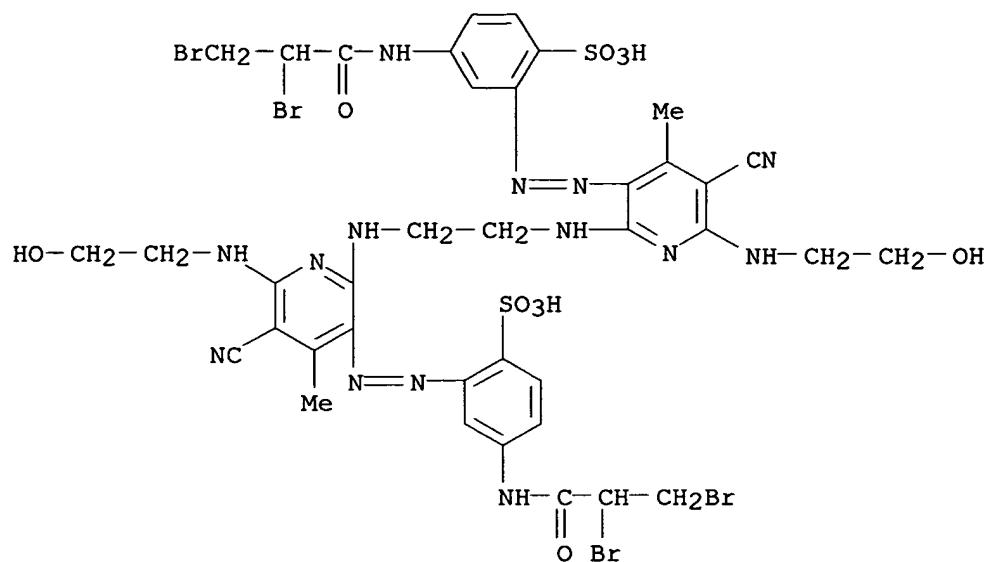
RN 155952-43-5 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]-, mixt. with 2-[5-cyano-2-[[2-[[3-cyano-5-[[5-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid and 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

CRN 155952-42-4

CMF C38 H40 Br4 N14 O10 S2

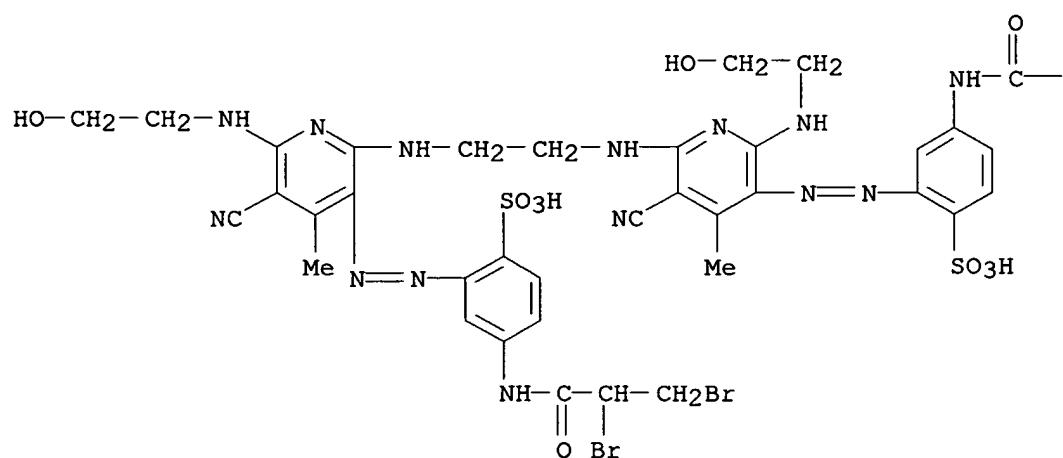


CM 2

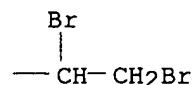
CRN 155952-41-3

CMF C38 H40 Br4 N14 O10 S2

PAGE 1-A



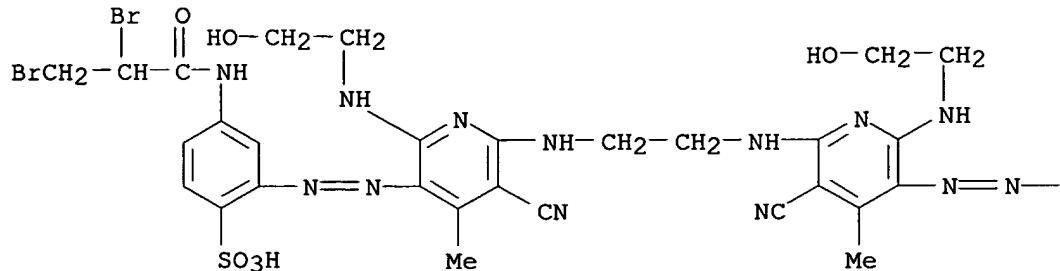
PAGE 1-B



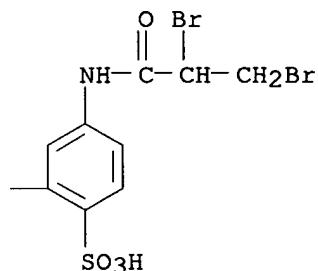
CM 3

CRN 155952-40-2  
 CMF C38 H40 Br4 N14 O10 S2

PAGE 1-A



PAGE 1-B

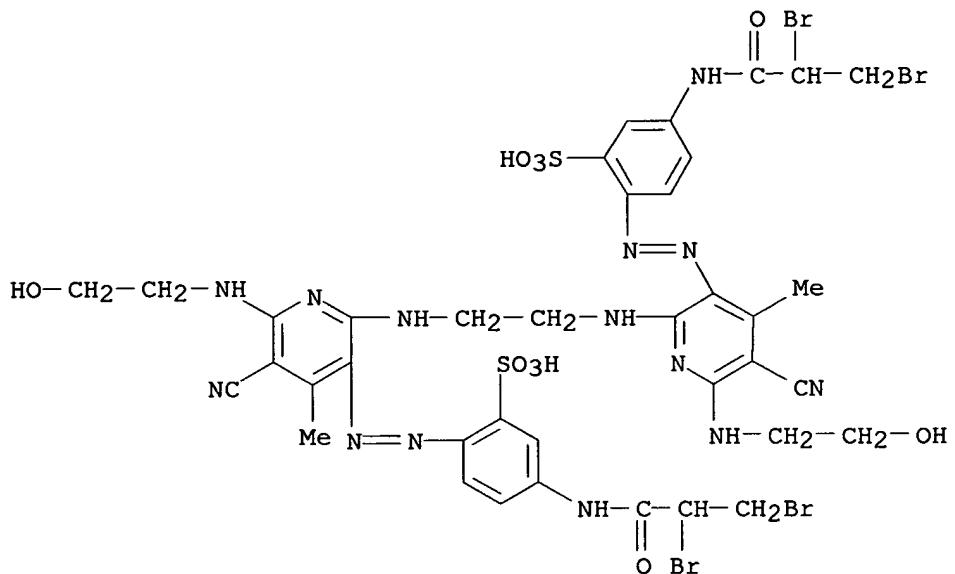


RN 155952-47-9 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]-, mixt. with 2-[[5-cyano-2-[[2-[[3-cyano-5-[(4-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-5-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid and 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

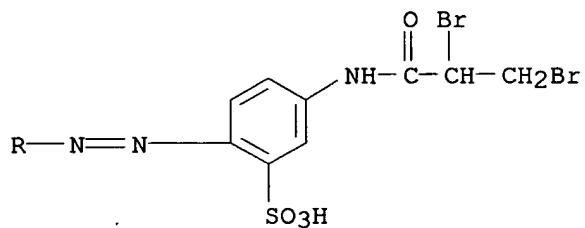
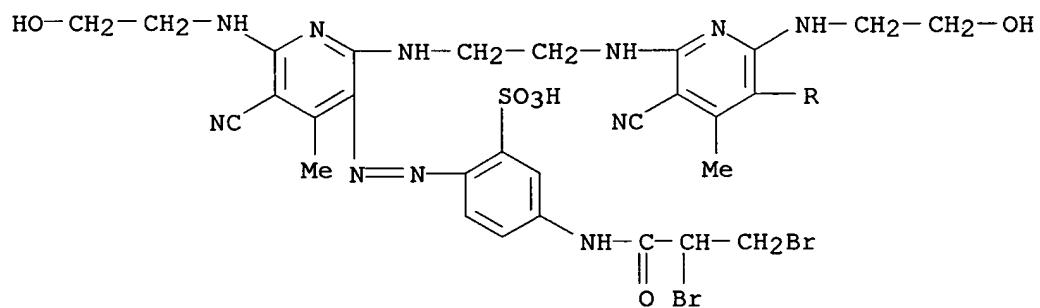
CRN 155952-46-8  
 CMF C38 H40 Br4 N14 O10 S2



CM 2

CRN 155952-45-7

CMF C38 H40 Br4 N14 O10 S2

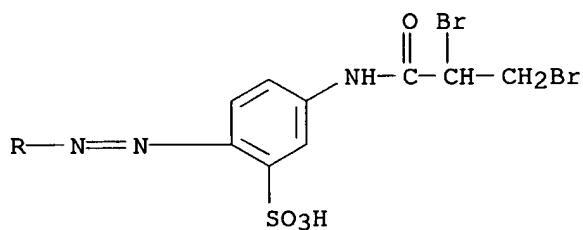
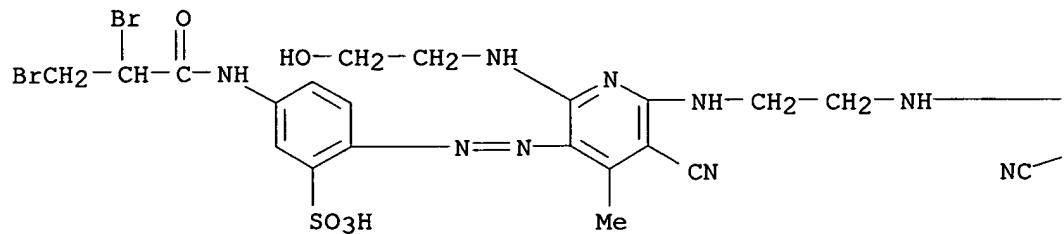


CM 3

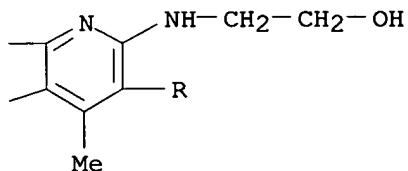
CRN 155952-44-6

CMF C38 H40 Br4 N14 O10 S2

PAGE 1-A



PAGE 1-B



IT 155952-50-4P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of, for coupling with diazotized aniline derivs.)

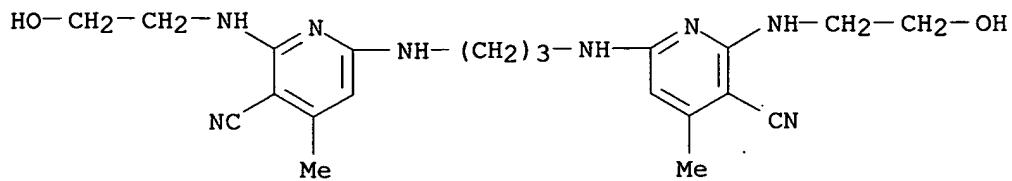
RN 155952-50-4 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-(1,3-propanediylidimino)bis[6-[(2-hydroxyethyl)amino]-4-methyl-, mixt. with 2-[[3-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]propyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile and 6,6'-(1,3-propanediylidimino)bis[2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile] (9CI) (CA INDEX NAME)

CM 1

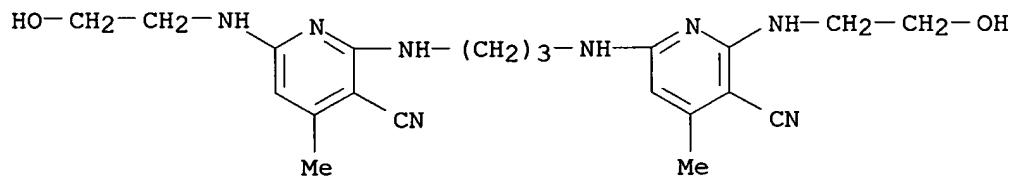
CRN 154196-49-3

CMF C21 H28 N8 O2



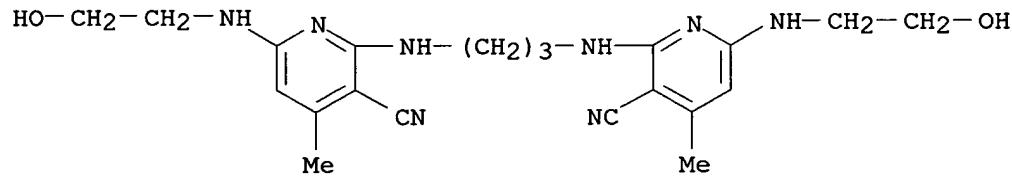
CM 2

CRN 154196-48-2  
CMF C21 H28 N8 O2



CM 3

CRN 154196-42-6  
CMF C21 H28 N8 O2



~~10/690,671~~

L13 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:247369 CAPLUS

DOCUMENT NUMBER: 120:247369

TITLE: Mixtures of aminopyridine compound isomers, their preparation, and their use as dye intermediates

INVENTOR(S): Herzig, Paul; Andreoli, Anton

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

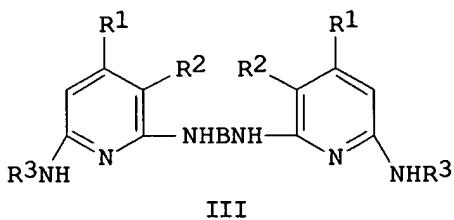
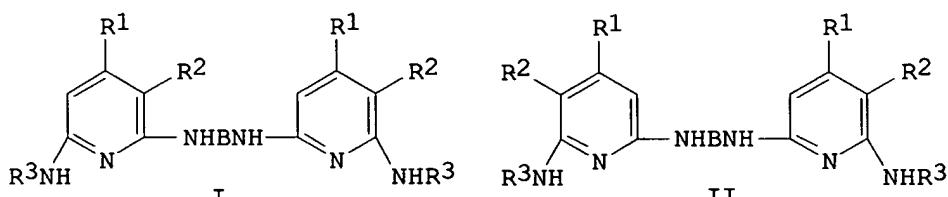
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 580554	A1	19940126	EP 1993-810507	19930714
R: BE, CH, DE, ES, FR, GB, IT, LI, PT JP 06157460	A2	19940603	JP 1993-182625 CH 1992-2351	19930723 A 19920723
PRIORITY APPLN. INFO.:				
OTHER SOURCE(S):	MARPAT	120:247369		
GI				



AB The bis(aminopyridines) I-III [B = (un)substituted C2-12 alkylene; R1 = C1-4 alkyl; R2 = CN, CONH<sub>2</sub>, sulfomethyl; R3 = H, (un)substituted C1-12 alkyl], useful as coupling components in the manufacture of azo dyes, are prepared by the condensation of pyridines (substituted in the 2- and 6-positions with leaving groups) with R<sub>3</sub>NH<sub>2</sub> and H<sub>2</sub>NBNH<sub>2</sub>. Thus, 2,6-dichloro-3-cyano-4-methylpyridine was condensed with ethanolamine and the 2 intermediate isomers condensed with 1,3-diaminopropane, producing product isomer mixture I-III (B = CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, R<sub>1</sub> = Me, R<sub>2</sub> = CN, R<sub>3</sub> = CH<sub>2</sub>CH<sub>2</sub>OH) in 35%, 5%, and 60% ratio, resp.

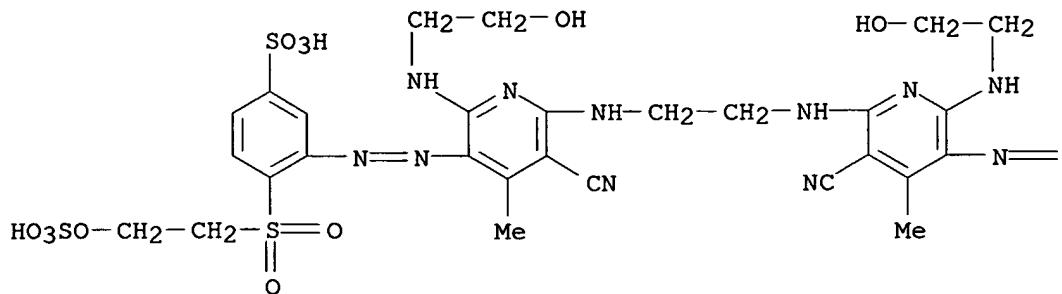
IT 154196-45-9P 154196-46-0P 154196-47-1P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of, as component of orange dye for cotton and wool)

RN 154196-45-9 CAPLUS

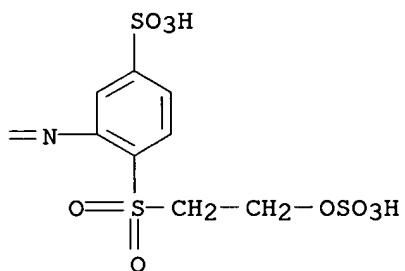
CN Benzenesulfonic acid, 3,3'-(1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[[2-

(sulfooxyethylsulfonyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



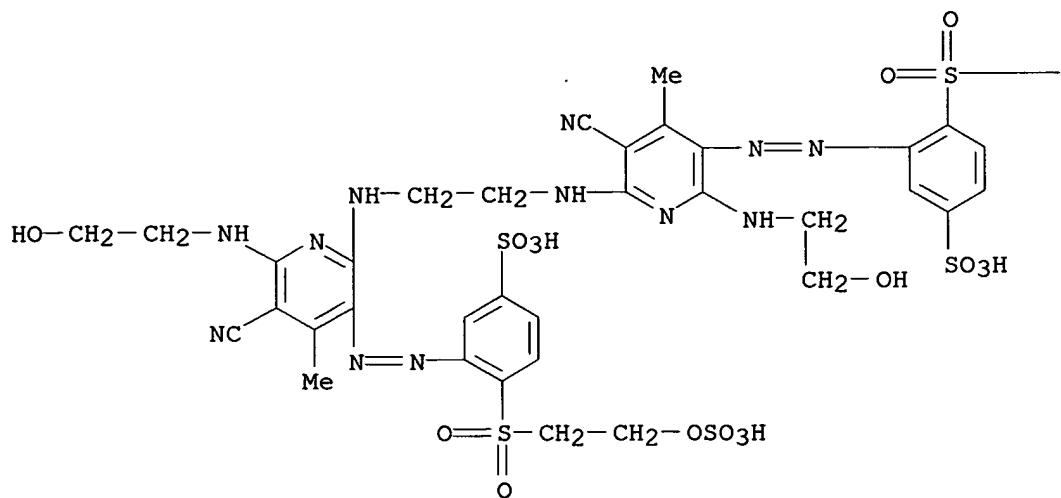
PAGE 1-B



RN 154196-46-0 CAPLUS

CN Benzenesulfonic acid, 3-[[5-cyano-6-[[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-3-[[5-sulfo-2-[(2-sulfooxyethylsulfonyl)phenyl]azo]-2-pyridinyl]amino]ethyl]amino]-2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[[2-(sulfooxyethylsulfonyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



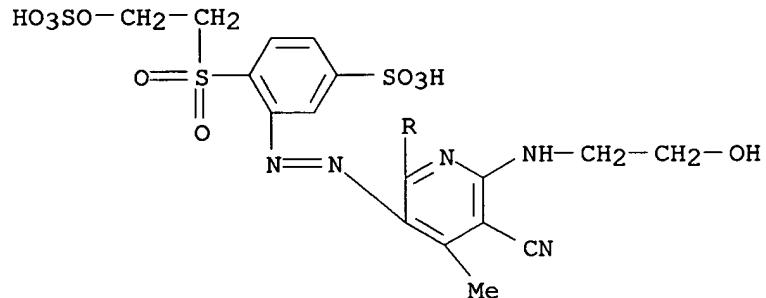
PAGE 1-B

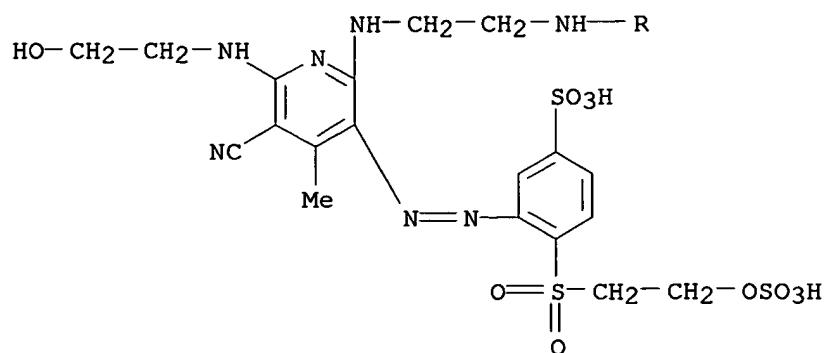
 $\text{---CH}_2\text{---CH}_2\text{---OSO}_3\text{H}$ 

RN 154196-47-1 CAPLUS

CN Benzenesulfonic acid, 3,3'-(1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo])bis[4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

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D13 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1994:120440 CAPLUS  
 DOCUMENT NUMBER: 120:120440  
 TITLE: Polyurea nonlinear optical device  
 INVENTOR(S): Hari, Shingu Naruya; Tsunoda, Atsushi  
 PATENT ASSIGNEE(S): Hitachi Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05196977	A2	19930806	JP 1992-243025	19920911
JP 2789957	B2	19980827		

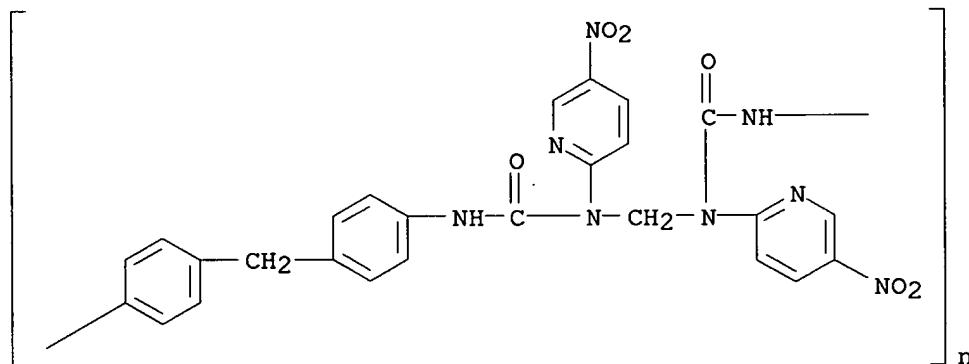
PRIORITY APPLN. INFO.: JP 1991-241687 A1 19910920  
 AB The title device comprises a high+-receiving surface, a light-emitting surface, and a polymer nonlinear optical medium consisting of a structural repeating unit represented by N(X)AN(X)CON(Y)13 N(Y)CO [A, B = CH<sub>2</sub> chains, (substituted) C<sub>6</sub>H<sub>6</sub>, biphenyl, terphenyl, stilbene, azobenzene, benzylidene, diphenylmethane, di-Ph ether, di-Ph thioether, acridine, fluorene, indole, heterocycles; X, Y = H, (substituted) C<sub>6</sub>H<sub>6</sub>, biphenyl, pyridine, azobenzene, benzylidene].

IT 152801-34-8 152801-36-0

RL: USES (Uses)  
 (nonlinear optical device from)

RN 152801-34-8 CAPLUS

CN Poly[iminocarbonyl[(5-nitro-2-pyridinyl)imino]methylene[(5-nitro-2-pyridinyl)imino]carbonylimino-1,4-phenylenemethylene-1,4-phenylene] (9CI)  
 (CA INDEX NAME)



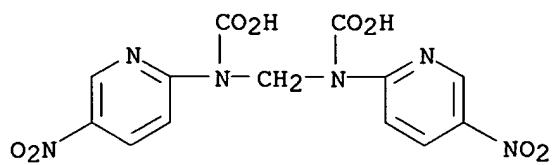
RN 152801-36-0 CAPLUS

CN Carbamic acid, methylenebis[(5-nitro-2-pyridinyl)-, polymer with 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

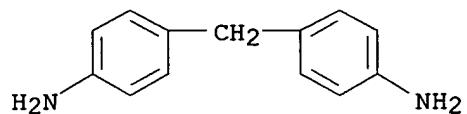
CRN 152801-35-9

CMF C13 H10 N6 O8



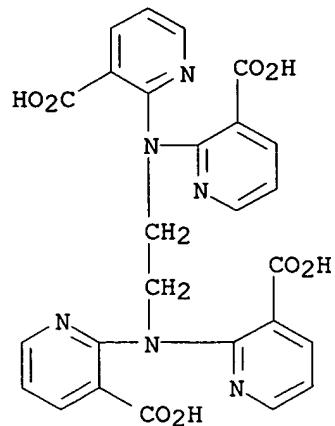
CM 2

CRN 101-77-9  
CMF C13 H14 N2



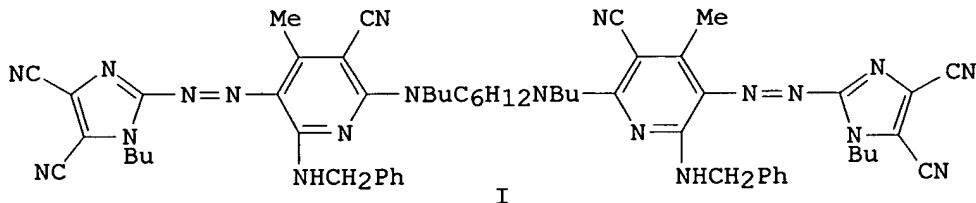
103 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:637899 CAPLUS  
 DOCUMENT NUMBER: 119:237899  
 TITLE: Photographic processing composition containing diamino polycarboxylic chelating agent to prevent sludge formation and the method for processing  
 INVENTOR(S): Okada, Hisashi; Inaba, Tadashi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05158195	A2	19930625	JP 1991-348429	19911205
JP 2824709	B2	19981118		
PRIORITY APPLN. INFO.:			JP 1991-348429	19911205
GI	For diagram(s), see printed CA Issue.			
AB	The claimed composition contains $\geq 1$ compound I (A = heterocyclic ring; R = H, substituent; n = 1-10; R1-3 = H, aliphatic aromatic or heterocyclic group; at least one of the R1-3 is substituted by OH, carboxy, sulfo, phosphono, sulfamido, carbonamido or carbamoyl group; Z = bivalent linkage comprising an alkylene or arylene group). Photog. processing using the composition is also claimed. It prevents the processing solution from forming sludges induced by contamination of metal ions.			
IT	151028-77-2			
RL	USES (Uses) (water softener, for photog. processing solns.)			
RN	151028-77-2 CAPLUS			
CN	3-Pyridinecarboxylic acid, 2,2',2'',2'''-(1,2-ethanediylidinitrilo)tetrakis-(9CI) (CA INDEX NAME)			



M13 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:528450 CAPLUS  
 DOCUMENT NUMBER: 119:128450  
 TITLE: Thermal-transfer sheets providing image with storage stability  
 INVENTOR(S): Kafuku, Masaaki; Eguchi, Hiroshi; Nakamura, Masayuki  
 PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05096869	A2	19930420	JP 1991-290348	19911011
PRIORITY APPLN. INFO.:			JP 1991-290348	19911011
GI				



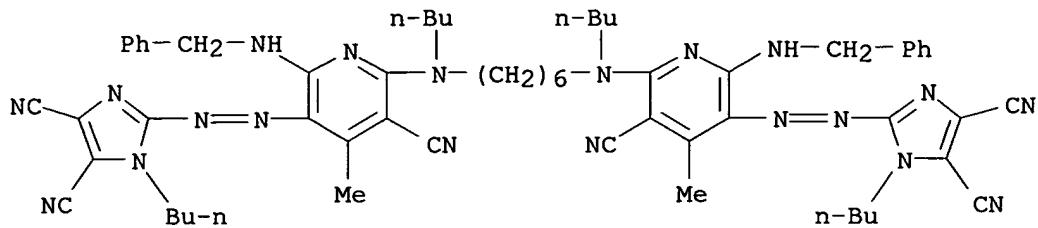
AB The title sheets comprise a support with a coating of a dye-carrying layer containing a dye having a chromophore from  $\geq 2$  azo bonds which are linked by a nonconjugated linking group and containing  $\geq 1$  pyridine ring. The sheets provide clear, high d. images with excellent storage stability. Thus, a PET film with a back coating layer was coated with a composition containing I and poly(vinyl butyral) resin to give a thermal-transfer sheet.

IT 149558-34-9 149558-39-4 149558-43-0  
 149558-44-1 149558-47-4 149558-48-5  
 149558-50-9 149558-51-0 149558-52-1  
 149558-55-4 149558-56-5 149558-57-6  
 149558-59-8

RL: USES (Uses)  
 (dye, thermal-transfer recording material using)

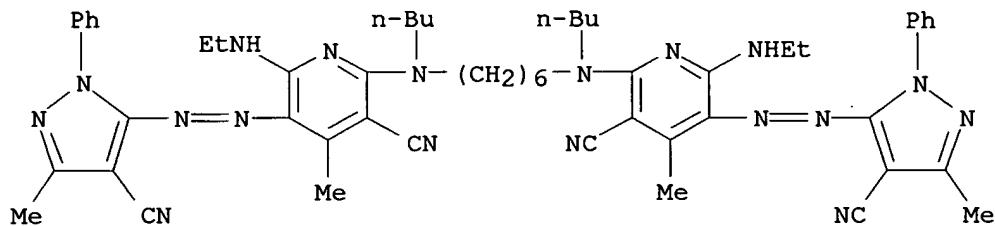
RN 149558-34-9 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile, 2,2'-[1,6-hexanediylibis[(butylimino)[3-cyano-4-methyl-6-[(phenylmethyl)amino]-2,5-pyridinediyl]azo]]bis[1-butyl-(9CI) (CA INDEX NAME)



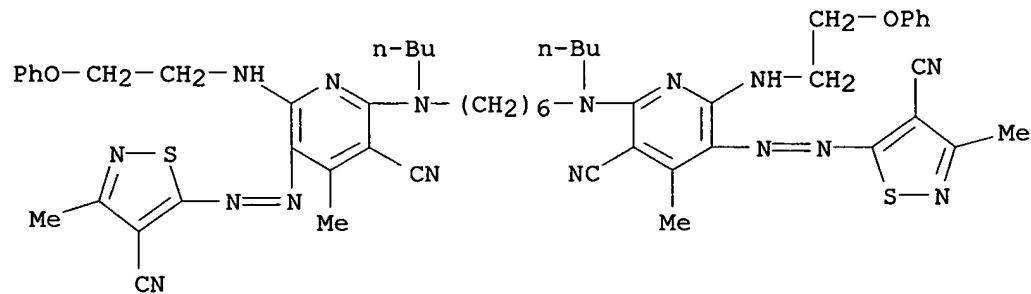
RN 149558-39-4 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[(4-cyano-3-methyl-1-phenyl-1H-pyrazol-5-yl)azo]-6-(ethylamino)-4-methyl-] (9CI) (CA INDEX NAME)



RN 149558-43-0 CAPLUS

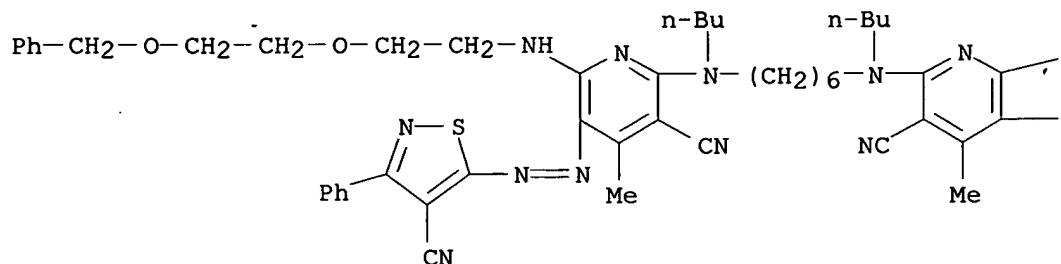
CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[(4-cyano-3-methyl-5-isothiazolyl)azo]-4-methyl-6-[(2-phenoxyethyl)amino]-] (9CI) (CA INDEX NAME)



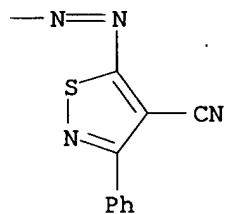
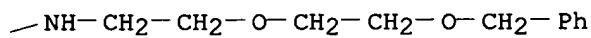
RN 149558-44-1 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[(4-cyano-3-phenyl-5-isothiazolyl)azo]-4-methyl-6-[[2-[2-(phenylmethoxy)ethoxy]ethyl]amino]-] (9CI) (CA INDEX NAME)

PAGE 1-A

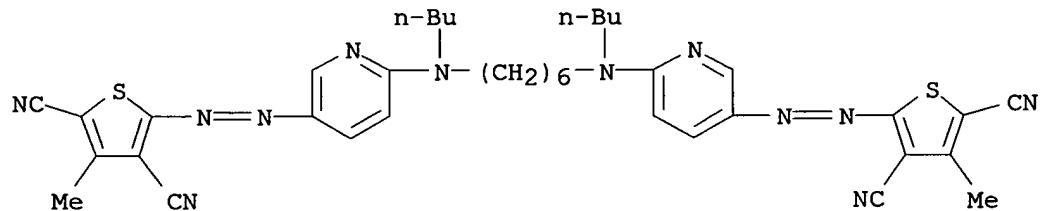


PAGE 1-B



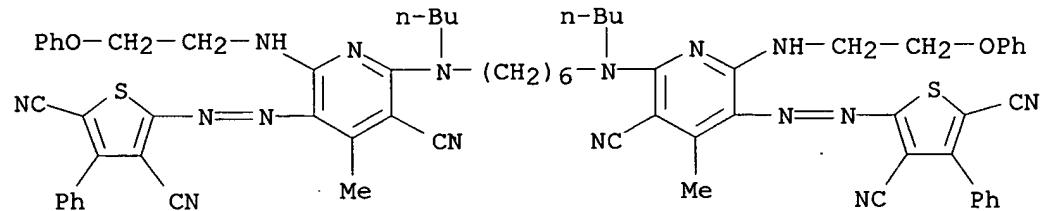
RN 149558-47-4 CAPLUS

CN 2,4-Thiophenedicarbonitrile, 5,5'-[1,6-hexanediylbis[(butylimino)-2,5-pyridinediylazo]]bis[3-methyl-(9CI) (CA INDEX NAME)



RN 149558-48-5 CAPLUS

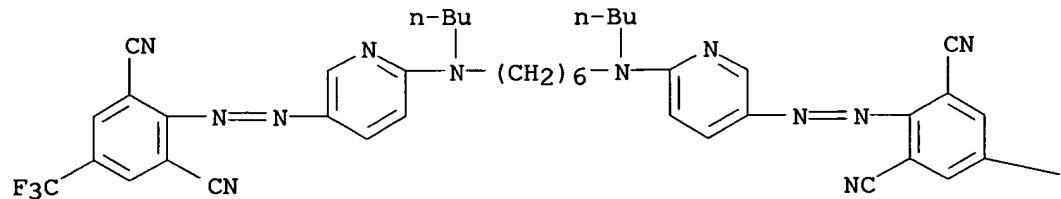
CN 2,4-Thiophenedicarbonitrile, 5,5'-[1,6-hexanediylbis[(butylimino)[3-cyano-4-methyl-6-[(2-phenoxyethyl)amino]-2,5-pyridinediyl]azo]]bis[3-phenyl-(9CI) (CA INDEX NAME)



10/690, 671

RN 149558-50-9 CAPLUS  
CN 1,3-Benzeneddicarbonitrile, 2,2'-[1,6-hexanediylbis[(butylimino)-2,5-pyridinediyylazo]]bis[5-(trifluoromethyl)-(9CI) (CA INDEX NAME)

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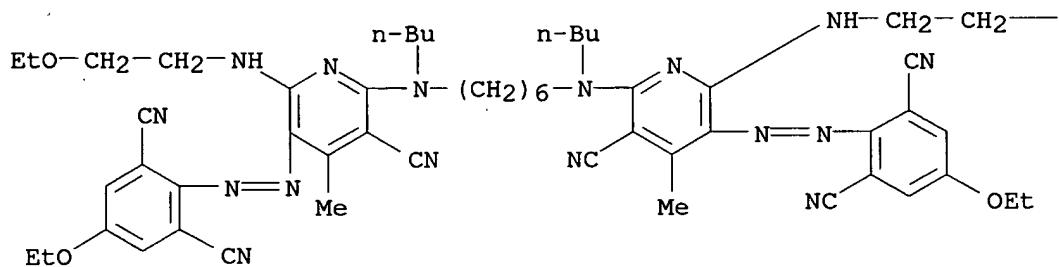


PAGE 1-B

— CF<sub>3</sub>

RN 149558-51-0 CAPLUS  
CN 1,3-Benzeneddicarbonitrile, 2,2'-[1,6-hexanediylbis[(butylimino)[3-cyano-6-[(2-ethoxyethyl)amino]-4-methyl-2,5-pyridinediyyl]azo]]bis[5-ethoxy-(9CI) (CA INDEX NAME)

PAGE 1-A

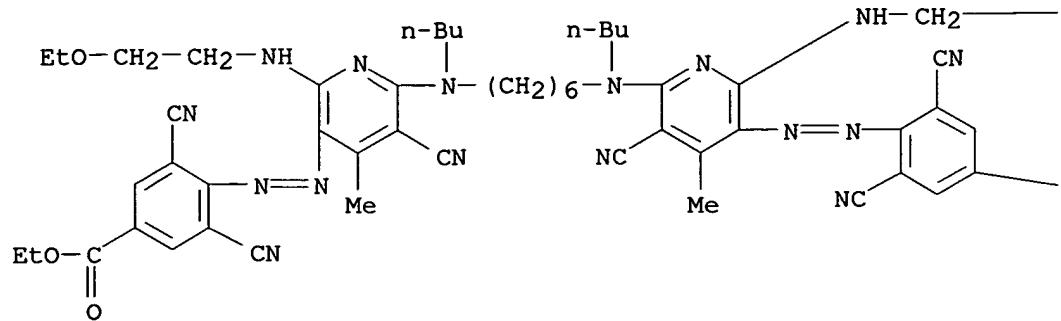


PAGE 1-B

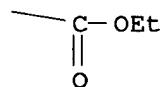
— OEt

RN 149558-52-1 CAPLUS  
CN Benzoic acid, 4,4'-[1,6-hexanediylbis[(butylimino)[3-cyano-6-[(2-ethoxyethyl)amino]-4-methyl-2,5-pyridinediyyl]azo]]bis[3,5-dicyano-, diethyl ester (9CI) (CA INDEX NAME)

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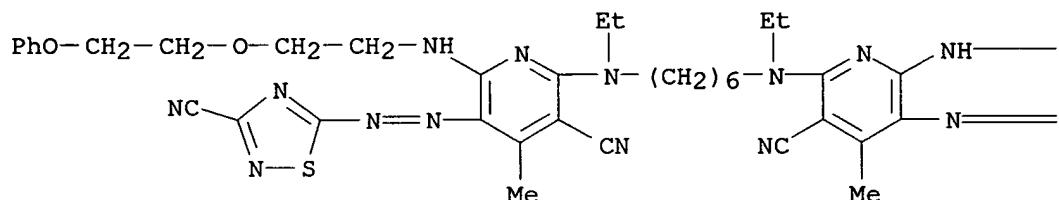
PAGE 1-B

 $-\text{CH}_2-\text{OEt}$ 

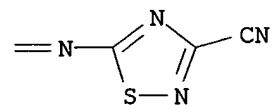
RN 149558-55-4 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(ethylimino)]bis[5-[(3-cyano-1,2,4-thiadiazol-5-yl)azo]-4-methyl-6-[(2-(2-phenoxyethoxy)ethyl]amino]- (9CI) (CA INDEX NAME)

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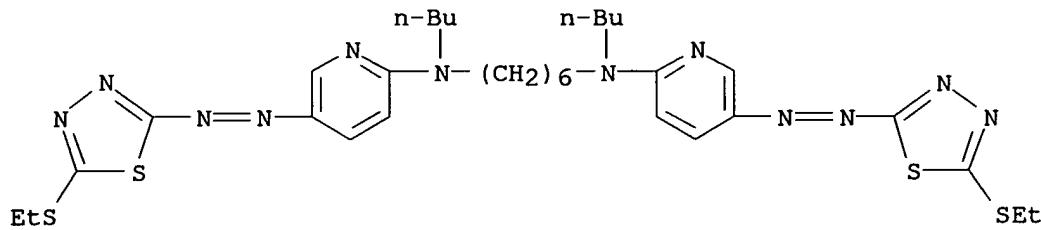


PAGE 1-B

 $-\text{CH}_2-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{OPh}$ 

RN 149558-56-5 CAPLUS

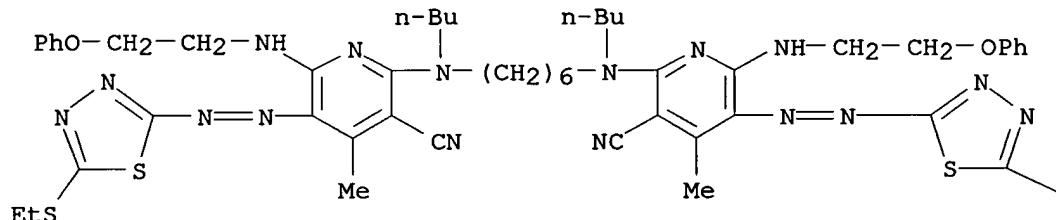
CN 1,6-Hexanediamine, N,N'-dibutyl-N,N'-bis[5-[[5-(ethylthio)-1,3,4-thiadiazol-2-yl]azo]-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 149558-57-6 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[[5-(ethylthio)-1,3,4-thiadiazol-2-yl]azo]-4-methyl-6-[(2-phenoxyethyl)amino]- (9CI) (CA INDEX NAME)

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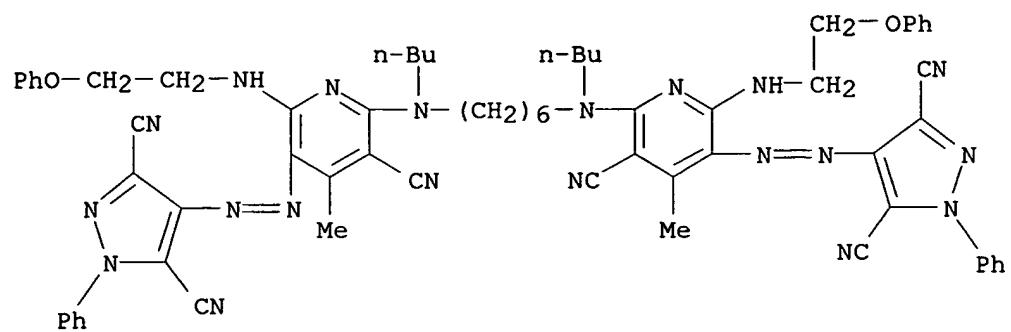


PAGE 1-B

SEt

RN 149558-59-8 CAPLUS

CN 1H-Pyrazole-3,5-dicarbonitrile, 4,4'-[1,6-hexanediylbis[(butylimino)[3-cyano-4-methyl-6-[(2-phenoxyethyl)amino]-2,5-pyridinediyl]azo]]bis[1-phenyl- (9CI) (CA INDEX NAME)



E13 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:204045 CAPLUS

DOCUMENT NUMBER: 118:204045

TITLE: Control of intramolecular electron transfer by protonation: oligomers of ruthenium porphyrins bridged by 4,4'-azopyridine

AUTHOR(S): Marvaud, Valerie; Launay, Jean Pierre

CORPORATE SOURCE: LOE, CEMES, Toulouse, 31055, Fr.

SOURCE: Inorganic Chemistry (1993), 32(8), 1376-82

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To exploit the control of an intramol. electron transfer by a protonation process, shish kebab oligomers were prepared by 1st preparing [Ru(TBP)CO(EtOH)] (H<sub>2</sub>TBP = tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin. This complex was photochem. decarbonylated in the presence of bridging ligands (4,4'-azopyridine or pyrazine). Oligomers are obtained, which can be oxidized by I, giving rise to intervalence transitions between Ru(II) and Ru(III) in the near-IR. This provides a convenient way to monitor electron transfer along the oligomer chain. In the case of 4,4'-azopyridine, a pH-induced redox reaction is observed Starting from a homovalent Ru(II) chain, this gives the possibility to switch on or off the intervalence transition by a protonation/deprotonation reaction.

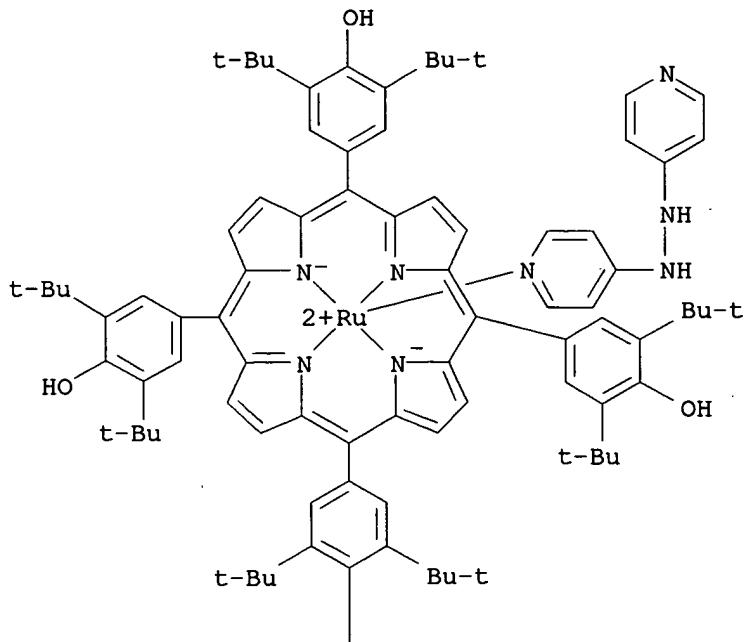
IT 143849-72-3P 147157-46-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 143849-72-3 CAPLUS

CN Ruthenium, [4,4'-hydrazobis[pyridine]-N1][[4,4'',4''',4''''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-) -N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

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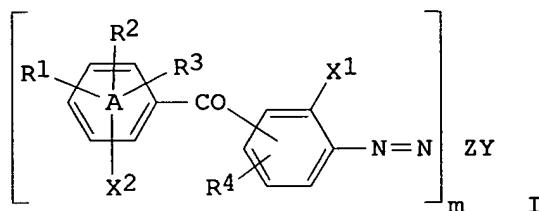
RN 147157-46-8 CAPLUS  
CN Ruthenium, [ $\mu$ -[4,4'-azobis[pyridine]-N1:N1']] [4,4'-hydrazobis[pyridine]-N1]bis[[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-) -N21,N22,N23,N24]di- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IN3 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:126484 CAPLUS  
 DOCUMENT NUMBER: 118:126484  
 TITLE: Benzophenone-derived azo dyes and their use  
 INVENTOR(S): Lamm, Gunther; Reichelt, Helmut; Schaffer, Ortwin  
 PATENT ASSIGNEE(S): BASF A.-G., Germany  
 SOURCE: Ger. Offen., 39 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4105257	A1	19920827	DE 1991-4105257	19910220
WO 9214791	A1	19920903	WO 1992-EP281	19920210
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
EP 572450	A1	19931208	EP 1992-904351	19920210
EP 572450	B1	19941026		
R: CH, DE, ES, FR, GB, IT, LI				
ES 2063580	T3	19950101	ES 1992-904351	19920210
JP 06041448	A2	19940215	JP 1992-57896	19920316
US 5380859	A	19950110	US 1993-87792	19930716
US 5510468	A	19960423	US 1994-281035	19940727
PRIORITY APPLN. INFO.:			DE 1991-4105257	A 19910220
			WO 1992-EP281	W 19920210
			US 1993-87792	A3 19930716

OTHER SOURCE(S): MARPAT 118:126484  
 GI



AB The dyes (I; X1, X2 = H, SO<sub>3</sub>H; R1-R3 = H, halogen, C1-12-alkyl, cyclohexyl, Ph, HOCH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>, C1-4-alkoxy; R4 = H, halogen, C1-4-alkoxy; Y = H, arylazo; Z = coupling component residue; m = 1, 2; ring A may be annelated) are obtained for use on polyamide fibers, leather, and wool. Thus, 4-amino-4'-methyl-3'-benzophenonesulfonic acid was diazotized and coupled with 1-hydroxy-8-amino-3,6-naphthalenedisulfonic acid to give an azo dye, which was then coupled with diazotized 4-amino-2',5'-dimethylbenzophenone to provide a disazo dye, λ<sub>max</sub> 604 nm, which imparted navy blue shades to leather, polyamides, and wool.

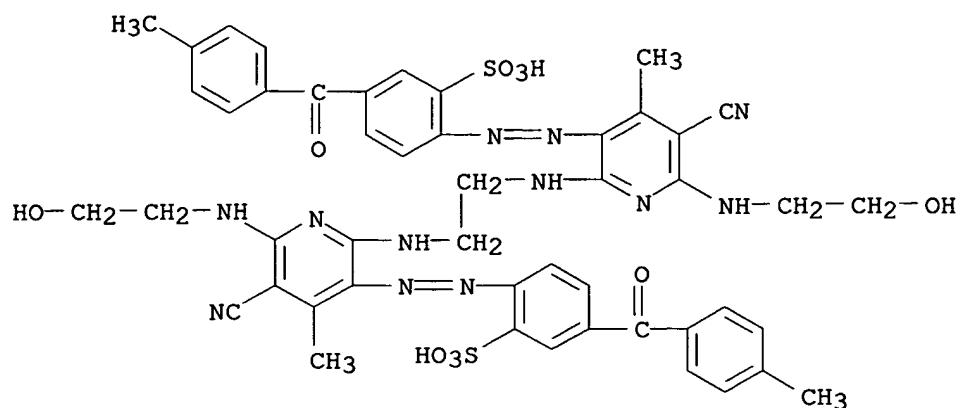
IT 145520-53-2P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of, as orange dye for leather, polyamide and wool)

RN 145520-53-2 CAPLUS

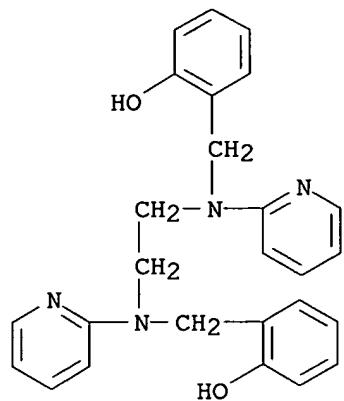
CN Benzenesulfonic acid, 2,2'-(1,2-ethanediylbis[imino[5-cyano-6-[ (2-

hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[5-(4-methylbenzoyl)-  
, disodium salt (9CI) (CA INDEX NAME)



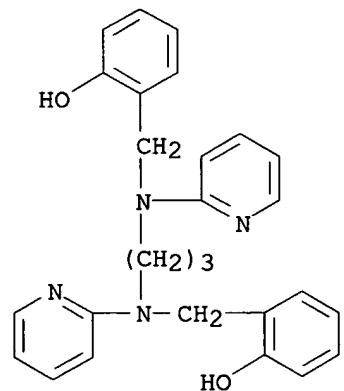
●2 Na

L43 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1992:663501 CAPLUS  
DOCUMENT NUMBER: 117:263501  
TITLE: Synthesis, crystal structure, electrochemical, and spectroelectrochemical properties of the new manganese(III) complex [MnIII(BBPEN)][PF6] [H2BBPEN = N,N'-bis(2-hydroxybenzyl)-N,N'-bis(2-methylpyridyl)ethylenediamine]  
AUTHOR(S): Neves, Ademir; Erthal, Sueli M. D.; Vencato, Ivo; Ceccato, Augusto S.; Mascarenhas, Yvonne P.; Nascimento, Otaciro R.; Horner, Manfredo; Batista, Alzir A.  
CORPORATE SOURCE: Dep. Quim., Univ. Fed. Santa Catarina, Florianopolis, Brazil  
SOURCE: Inorganic Chemistry (1992), 31(23), 4749-55  
CODEN: INOCAJ; ISSN: 0020-1669  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB H2L [H2L = N,N'-bis(2-hydroxybenzyl)-N,N'-bis(2-pyridylmethyl)ethylenediamine (H2BBPEN), N,N'-bis(2-hydroxybenzyl)-N,N'-bis(2-pyridylmethyl)-1,3-propanediamine (H2BBPPN)], derived from alkyldiamines containing phenolate-type and  $\alpha$ -pyridyl pendant arms, were prepared. Reaction of H2L with Mn(OAc)<sub>3</sub> in MeOH solution gave [MnL][PF6] in high yields. The crystal structure of [Mn(BBPEN)][PF6] (1) was determined by x-ray crystallog. Crystal data: monoclinic, space group P21/n, a 11.310(2), b 21.266(3), c 11.791(4) Å,  $\beta$  106.7(2) $^\circ$ , Z = 4, R = 0.063,  $R_w$  = 0.072. In 1, BBPEN is hexadentate with distorted octahedral MnN<sub>4</sub>O<sub>2</sub> geometry and 2 trans pyridyl groups. The presence of 4 short Mn-O and Mn-N bonds and 2 long Mn-N bonds are consistent with Jahn-Teller effects. The magnetic moments (4.85-4.90  $\mu$ B) of [MnL][PF6] correspond to the d<sub>4</sub> configuration. Cyclic voltammograms of 1 and [Mn(BBPPN)][PF6] (2) in MeCN show 2 quasireversible 1-electron-transfer processes corresponding, resp., to Mn(IV)/Mn(III) at 0.24 and 0.61 V and Mn(III)/Mn(II) at -0.37 and -0.44 V vs. ferrocinium/ferrocene. UV-visible spectroelectrochem. was used to characterize the Mn(IV) analogs of these complexes. E° Values obtained from these spectropotentiostatic data are consistent with values determined from cyclic voltammograms. The electronic spectra of the oxidized species show 2 intense ligand-to-metal charge-transfer (LMCT) transitions at 400-800 nm, and solns. of [MnIV(BBPEN)]<sup>2+</sup> are stable for  $\geq$ 24 h under Ar. The X-band EPR spectra of [MnIV(BBPEN)]<sup>2+</sup> obtained at 110 K shows prominent features at g<sub>1</sub> = 5.84, g<sub>2</sub> = 4.77, and g<sub>3</sub> = 1.99 and is consistent with a rhombically distorted S = 3/2 spin system.  
IT 144512-79-8P 144512-80-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 144512-79-8 CAPLUS  
CN Phenol, 2,2'-(1,2-ethanediylbis[(2-pyridinylimino)methylene])bis- (9CI)  
(CA INDEX NAME)



RN 144512-80-1 CAPLUS

CN Phenol, 2,2'-(1,3-propanediylbis[(2-pyridinylimino)methylene])bis- (9CI)  
(CA INDEX NAME)



ANSWER 27 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1992:583695 CAPLUS  
DOCUMENT NUMBER: 117:183695  
TITLE: Control of intramolecular electron transfer by protonation: dimers and polymers containing ruthenium II/III and 4,4'-azopyridine  
AUTHOR(S): Launay, Jean Pierre; Marvaud, Valerie  
CORPORATE SOURCE: Mol. Electron. Group, CNRS, Toulouse, 31055, Fr.  
SOURCE: AIP Conference Proceedings (1992), 262(Mol. Electron.: Sci. Technol.), 118-28  
CODEN: APCPCS; ISSN: 0094-243X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To exploit control of an intramol. electron transfer by a protonation process, shishkebab polymers were prepared by 1st inserting Ru in tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin (H<sub>2</sub>L) under a CO atmospheric

The resulting RuL(CO)(EtOH) was photochem. decarbonylated in the presence of bridging ligands (4,4'-azopyridine or pyrazine). Polymers were obtained, which could be oxidized by I<sub>2</sub>, giving rise to intervalence transitions between Ru(II) and (III) in the near IR. This provides a convenient way to monitor electron transfer along the polymer chain. In the case of 4,4'-azopyridine, the pH induced redox reaction is observed. Starting from a homovalent Ru(II) chain, this gives the possibility to switch on or off the intervalence transition by a protonation/deprotonation reaction.

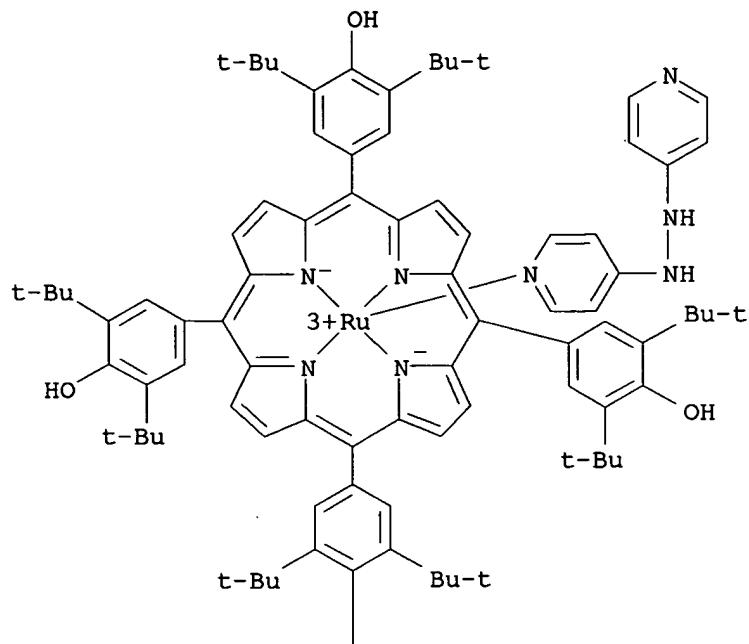
IT 143849-71-2DP, reaction product with ruthenium azopyridine pyrazine porphyrinato complex

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and electronic spectrum of)

RN 143849-71-2 CAPLUS

CN Ruthenium(1+), [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

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IT **143849-69-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and intervalence transition absorptivity of)

RN 143849-69-8 CAPLUS

CN Ruthenium(1+), [ $\mu$ -[4,4'-hydrazobis[pyridine]-N1:N1']] [4,4'-hydrazobis[pyridine]-N1]bis[[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]di- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

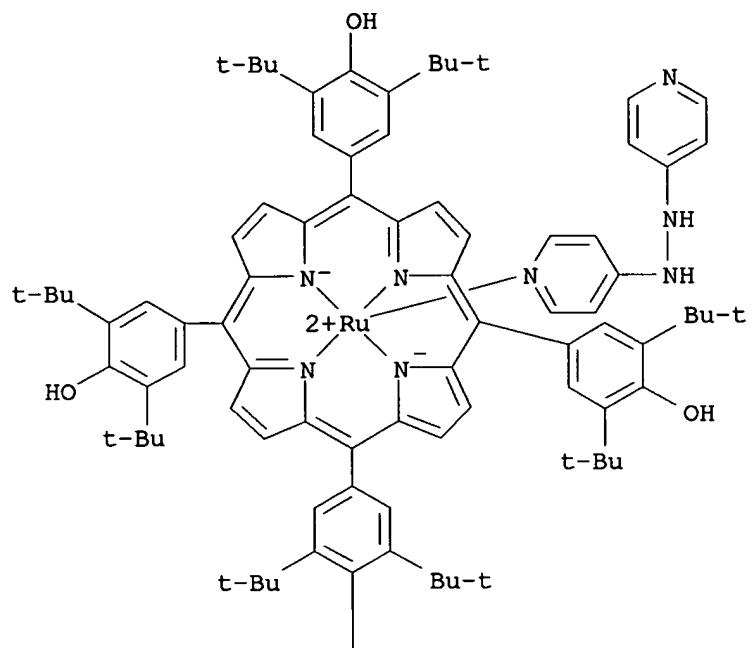
IT **143849-72-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and oxidation of, by iodine)

RN 143849-72-3 CAPLUS

CN Ruthenium, [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

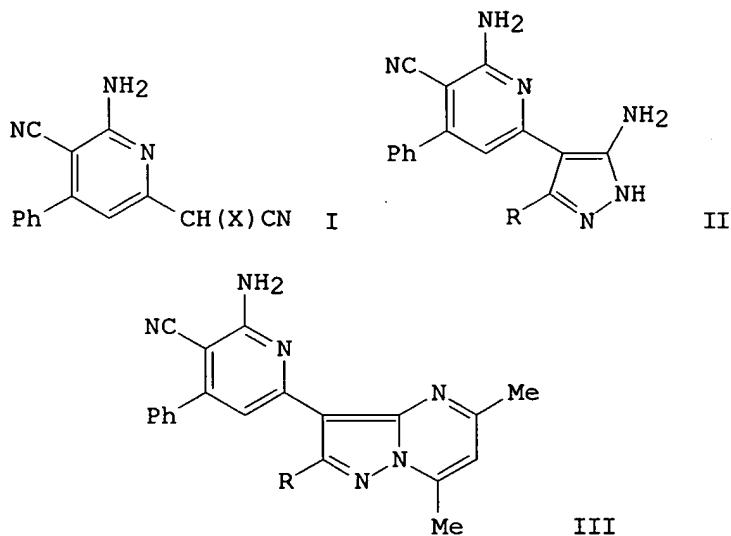
PAGE 1-A



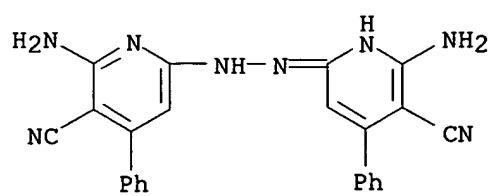
PAGE 2-A



118 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:56040 CAPLUS  
 DOCUMENT NUMBER: 108:56040  
 TITLE: Synthesis of new 3-(pyridin-6-yl)pyrazolo[1,5-a]pyrimidines  
 AUTHOR(S): Ibrahim, Nadia Sobhy; Mohamed, Mona Hassan; Elnagdi,  
 Mohamed Hilmy  
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt  
 SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1987),  
 320(6), 487-91  
 CODEN: ARPMAS; ISSN: 0365-6233  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:56040  
 GI

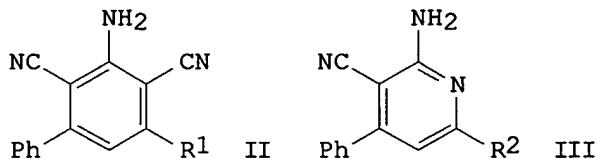


- AB Reaction of PhCMe:C(CN)<sub>2</sub> with Cl<sub>3</sub>CC(NH<sub>2</sub>):C(X)CN (X = CN, CO<sub>2</sub>Et, COPh) in pyridine gave (cyanomethyl)pyridines I (same X). Cyclization of I (X = CN, CO<sub>2</sub>Et) with NH<sub>2</sub>NH<sub>2</sub> gave (aminopyrazolyl)pyridines II (R = NH<sub>2</sub>, OH) the last were cyclocondensed with acetylacetone to give the title compds. III (same R).  
 IT 106763-24-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 106763-24-0 CAPLUS  
 CN 3-Pyridinecarbonitrile, 6,6'-hydrazobis[2-amino-4-phenyl- (9CI) (CA INDEX NAME)



10/690,671

L13 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1987:213550 CAPLUS  
DOCUMENT NUMBER: 106:213550  
TITLE:  $\alpha,\beta$ -Unsaturated nitriles in organic synthesis: a novel synthesis of biaryls and azabiaryls  
AUTHOR(S): Abdel Galil, Fathy M.; Elnagdi, Mohamed H.  
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Egypt  
SOURCE: Liebigs Annalen der Chemie (1987), (5), 477-9  
CODEN: LACHDL; ISSN: 0170-2041  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 106:213550  
GI



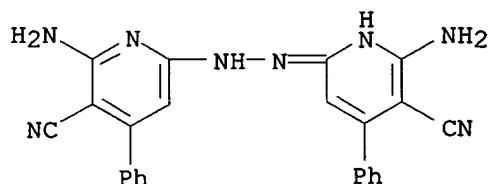
AB Treating PhCMe:C(CN)2 (I) with R1CH:CR-CN (R = CSNH2, CO2Et, COPh; R1 = 4-MeOC6H4, 4-ClC6H4, 2-furyl, Ph) and piperidine in CH2Cl2 gave up to 72% aminoaryldicyanobenzenes II. Treating I with CH2(CN)2 and Cl3CCN gave 65 and 55% aminocyanophenylpyridines III (R2 = NCCH2, Cl3C) resp.

IT 106763-24-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 106763-24-0 CAPLUS

CN 3-Pyridinecarbonitrile, 6,6'-hydrazobis[2-amino-4-phenyl- (9CI) (CA INDEX NAME)



10/690,671

LJS ANSWER 30 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1986:79163 CAPLUS  
DOCUMENT NUMBER: 104:79163  
TITLE: Electrophotographic materials  
INVENTOR(S): Enomoto, Kazuhiko  
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60149048	A2	19850806	JP 1984-5320	19840113
JP 03056629	B4	19910828		
PRIORITY APPLN. INFO.: GI			JP 1984-5320	19840113

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title materials comprise a charge carrier-transport layer containing I (R = allyl, propargyl, C1-4 alkyl, benzyl, Ph; R1 = C1-2 alkyl, halo, C1-2 alkoxy, H; R2 = Ph, C1-4 alkyl, H; R3 = Ph, 2-pyridyl; n = 0, 1; m = 1-12). The materials show high photosensitivity and durability. Thus, p-diethylaminobenzaldehyde 2-pyridylhydrazone (prepared from a 1:1 mol mixture of p-diethylaminobenzaldehyde and 2-hydrazinopyridine) 6.0 and 1,2-dibromoethane 1.9 g were dissolved in DMF 40 mL, 3N NaOH 8.0 mL added dropwise at room temperature, and the mixture stirred for 6 h to obtain I (R = Et;

R1 = H; R2 = H; n = 0; m = 2; R3 = 2-pyridyl; yellow-orange powder; m.p. 158-160° (II) 5.6 g. An Al-laminated polyester film (polyester film 85 μ thick; Al film 10 μ thick) was coated with a butylamine solution containing 1% III, dried to form a charge carrier-generating layer 0.2 μ thick, coated with a dichloroethane solution containing a 10% 1:1:2 II-U-Polymer (polyacrylate) mixture, and dried to form a charge carrier-transport layer 12 μ thick. The obtained electrophotog. material showed high sensitivity to visible light and excellent durability.

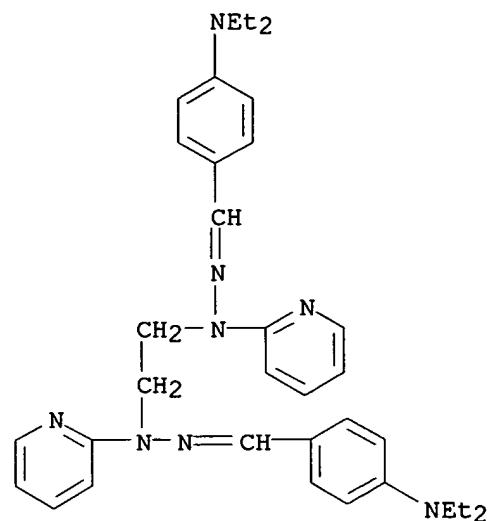
IT 100070-53-9

RL: USES (Uses)

(charge carrier-transporting agent, for electrophotog. plates)

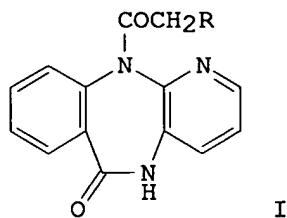
RN 100070-53-9 CAPLUS

CN Benzaldehyde, 4-(diethylamino)-, 1,2-ethanediylbis(2-pyridinylhydrazone) (9CI) (CA INDEX NAME)



10/690,671

L13 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1984:34516 CAPLUS  
DOCUMENT NUMBER: 100:34516  
TITLE: New synthesis of 11-acyl-5,11-dihydro-6H-pyrido[2,3-b][1,4]benzodiazepin-6-ones and related studies  
AUTHOR(S): Kovac, T.; Oklobdzija, M.; Comisso, G.; Decorte, E.; Fajdiga, T.; Moimas, F.; Angeli, C.; Zonno, F.; Toso, R.; Sunjic, V.  
CORPORATE SOURCE: Chem. Res. Co., San Giovanni, Italy  
SOURCE: Journal of Heterocyclic Chemistry (1983), 20(5), 1339-49  
DOCUMENT TYPE: CODEN: JHTCAD; ISSN: 0022-152X  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 100:34516  
GI



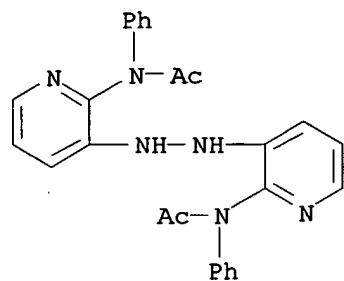
AB 11-Acyl-5,11-dihydro-6H-pyrido[2,3-b][1,4]benzodiazepin-6-ones I (R = 4-methylpiperazino, imidazolo, 2-methylimidazolo) were prepared via N- $\alpha$ -chloroacetylation and aminolysis. Other attempts at cyclization to form I are also reported.

IT 88369-71-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

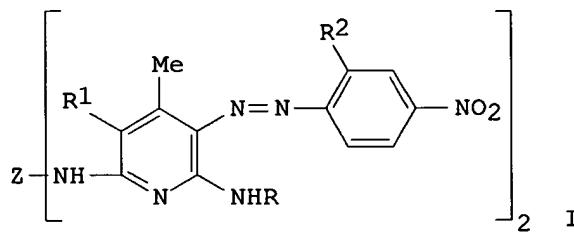
RN 88369-71-5 CAPLUS

CN Acetamide, N,N'-(hydrazodi-3,2-pyridinediyl)bis[N-phenyl- (9CI) (CA INDEX NAME)



~~103~~ ANSWER 32 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1984:8494 CAPLUS  
 DOCUMENT NUMBER: 100:8494  
 TITLE: Disperse disazo dyes  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58101158	A2	19830616	JP 1981-199628	19811210
PRIORITY APPLN. INFO.:			JP 1981-199628	19811210
GI				



AB Pyridine ring-containing disazo dyes, e.g. I ( $\text{R} = \text{CH}_2\text{CH}_2\text{OH}$ ;  $\text{R}^1 = \text{R}^2 = \text{CN}$ ;  $\text{Z} = \text{CH}_2\text{CH}_2$ ) [88183-51-1] and I ( $\text{R} = \text{CH}_2\text{CHMeOEt}$ ;  $\text{R}^1 = \text{CONH}_2$ ;  $\text{R}^2 = \text{H}$ ;  $\text{Z} = (\text{CH}_2)_3$ ) [88183-52-2], were prepared and used for dyeing polyester fibers and plastics. Thus, 2,6-dichloro-3-cyano-4-methylpyridine [875-35-4] was condensed with ethylenediamine [107-15-3] and then with 2-hydroxyethylamine [141-43-5] to give mainly  $\text{N},\text{N}'\text{-bis}[3\text{-cyano-6-(2-hydroxyethylamino)-4-methyl-2-pyridyl}]$ ethylenediamine [88183-48-6], which was then coupled with diazotized 2-cyano-4-nitroaniline [17420-30-3] to give II, fast red on polyester fiber and in ABS [9003-56-9].

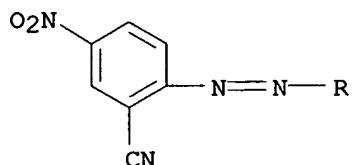
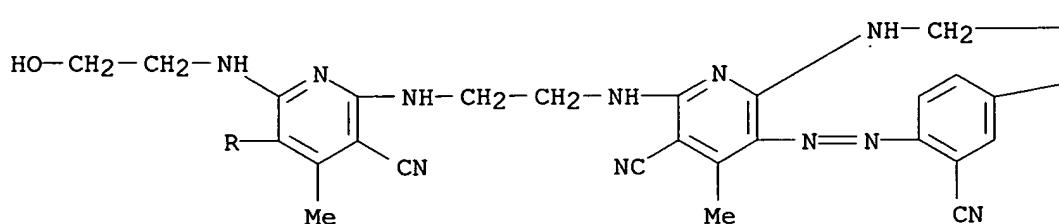
IT 88183-51-1 88183-52-2

RL: MSC (Miscellaneous)  
 (dyes, for polyester fibers and plastics, manufacture of)

RN 88183-51-1 CAPLUS

CN 3-Pyridinecarbonitrile, 2,2'-(1,2-ethanediyldiimino)bis[5-[(2-cyano-4-nitrophenyl)azo]-6-[(2-hydroxyethyl)amino]-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A



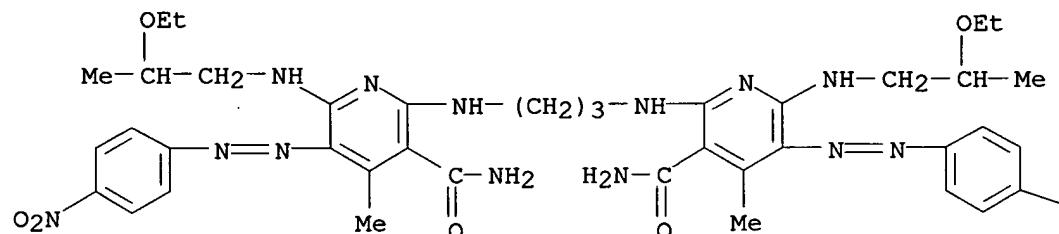
PAGE 1-B

—CH<sub>2</sub>—OH—NO<sub>2</sub>

RN 88183-52-2 CAPLUS

CN 3-Pyridinecarboxamide, 2,2'-(1,3-propanediylidimino)bis[6-[(2-ethoxypropyl)amino]-4-methyl-5-[(4-nitrophenyl)azo]- (9CI) (CA INDEX NAME)

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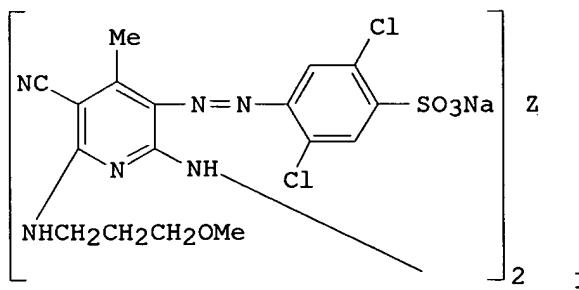


PAGE 1-B

—NO<sub>2</sub>

113 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1976:448266 CAPLUS  
 DOCUMENT NUMBER: 85:48266  
 TITLE: 2,6-Diaminopyridine dyes  
 INVENTOR(S): Dehnert, Johannes; Lamm, Gunther  
 PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 25 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2454492	A1	19760520	DE 1974-2454492	19741116
BE 835494	A1	19760301	BE 1975-161797	19751112
FR 2291257	A1	19760611	FR 1975-34885	19751114
JP 51073027	A2	19760624	JP 1975-136448	19751114
PRIORITY APPLN. INFO.:			DE 1974-2454492	A 19741116
GI				



AB Two azo dyes (I, Z = CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, CH<sub>2</sub>C<sub>6</sub>H<sub>3</sub>SO<sub>3</sub>Na) were prepared by coupling diazotized 2,5,4-C12(HO<sub>3</sub>S)C<sub>6</sub>H<sub>2</sub>NH<sub>2</sub> [88-50-6] with the appropriate coupler and dyed polyamide and wool fibers fast reddish yellow to yellow shades.

IT 59866-42-1

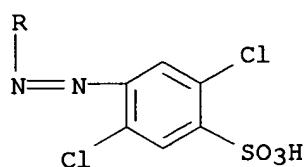
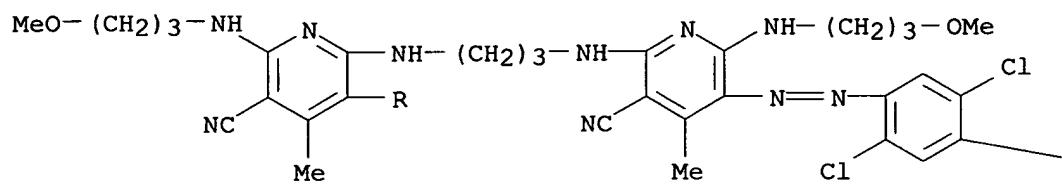
RL: USES (Uses)

(dye, for polyamide and wool fibers, preparation of)

RN 59866-42-1 CAPLUS

CN Benzenesulfonic acid, 2,5-dichloro-4-[[5-cyano-2-[[3-[[3-cyano-5-[(2,5-dichloro-4-sulfophenyl)azo]-6-[(3-methoxypropyl)amino]-4-methyl-2-pyridinyl]amino]propyl]amino]-6-[(3-methoxypropyl)amino]-4-methyl-3-pyridinyl]azo]-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Na

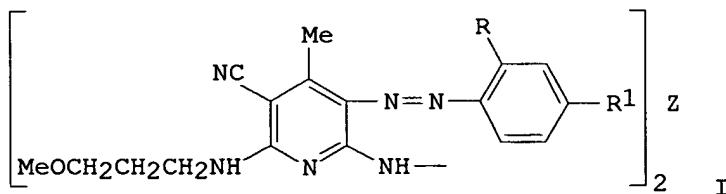
PAGE 1-B

— SO<sub>3</sub>H

D13 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1976:166240 CAPLUS  
 DOCUMENT NUMBER: 84:166240  
 TITLE: 2,6-Diaminopyridine dyes  
 INVENTOR(S): Dehnert, Johannes; Lamm, Gunther  
 PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 31 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2438130	A1	19760219	DE 1974-2438130	19740808
US 3974123	A	19760810	US 1975-551493	19750220
NL 7502419	A	19750903	NL 1975-2419	19750228
FR 2262681	A1	19750926	FR 1975-6343	19750228
JP 50124942	A2	19751001	JP 1975-24108	19750228
GB 1499181	A	19780125	GB 1975-8384	19750228
PRIORITY APPLN. INFO.:			DE 1974-2409754	A 19740301
			DE 1974-2437203	A 19740802
			DE 1974-2438130	A 19740808

GI



AB Two azo dyes (I, R = CF<sub>3</sub>, CN; R<sub>1</sub> = H, Cl; Z = CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, p-CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>) were prepared and mass dyed polystyrene [9003-53-6], PVC [9002-86-2], polypropylene [9003-07-0], polyethylene [9002-88-4], polyamides, and polyester fast, strong yellow shades. Thus, 2,6-dichloro-3-cyano-4-methylpyridine [875-35-4] was successively treated with H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> [109-76-2] and MeOCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> [5332-73-0] to give coupling component [59000-71-4] which was coupled with diazotized 2-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CN [1885-29-6] to give I (R = CN, R<sub>1</sub> = H) [59000-72-5]. The other I was similarly prepared

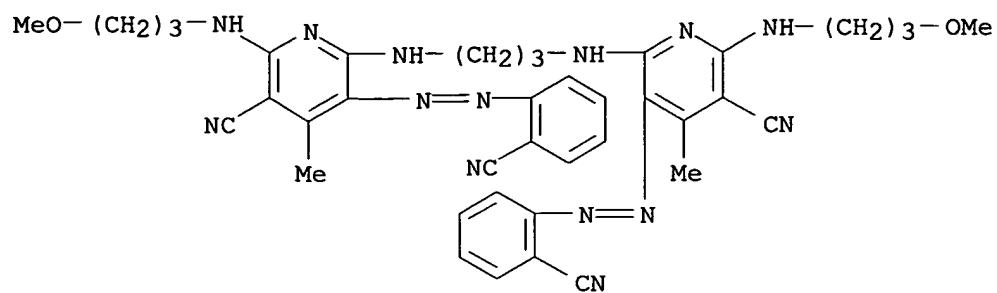
IT 59000-72-5

RL: USES (Uses)

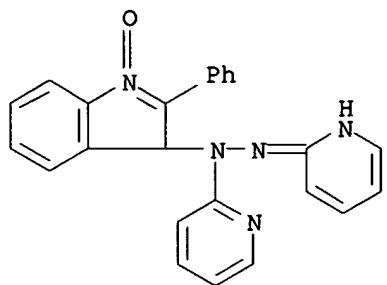
(dye, for thermoplastics, preparation of)

RN 59000-72-5 CAPLUS

CN 3-Pyridinecarbonitrile, 6,6'-(1,3-propanediylidimino)bis[5-[(2-cyanophenyl)azo]-2-[(3-methoxypropyl)amino]-4-methyl- (9CI) (CA INDEX NAME)

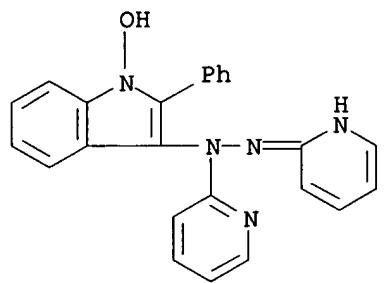


I13 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1968:402782 CAPLUS  
 DOCUMENT NUMBER: 69:2782  
 TITLE: Alkene analogs and their synthesis. XX. Reactions of  
 1-hydroxy-2-phenylindole with nitrogen-heterocycle azo  
 compounds. (Electron transfer processes.)  
 AUTHOR(S): Colonna, Martino; Bruni, Paolo  
 CORPORATE SOURCE: Univ. Bologna, Italy  
 SOURCE: Gazzetta Chimica Italiana (1967), 97(11), 1584-93  
 CODEN: GCITA9; ISSN: 0016-5603  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Italian  
 GI For diagram(s), see printed CA Issue.  
 AB The title indole (I) is treated with sym. and unsym. azo compds. to give  
 mixts. containing II. Thus, a mixture of 1.6 g. I, 1.5 g. 2,2'-azopyridine  
 (III), and 130 ml. C6H6 is refluxed 5 hrs. to give 1.5 g.  
 2-phenyl-3-(2-pyridylimino)indole N-oxide (IV), m. 212-13° (EtOH),  
 and a small amount II, m. 225°. The same products are obtained in  
 EtOH. A mixture of 1.4 g. I, 1.2 g. III, and 150 ml. Et2O is kept 5 hrs. to  
 give 2-phenyl-3-[1,2-bis(2-pyridyl)hydrazino]-3H-indole N-oxide (V), m.  
 136-40°. A mixture of 0.5 g. V and EtOH is refluxed 5 hrs. to give  
 IV. A solution of 0.5 g. V and 50 ml. EtOH containing 5 ml. concentrated HCl  
 is kept  
 30 min. to give 2-phenylisatogen, m. 186°, also obtained from IV in  
 EtOH containing HCl. A solution of 4.75 g. I in 500 ml. ether is mixed with a  
 solution of 4 g. 4,4'-azopyridine (VI) and 150 ml. ether and the mixture kept  
 20 days to give 4.60 g. 4,4'-hydrazopyridine (VII), m. 255-60  
 (pyridine-ligroine), and II, m. 225°. A solution of 2 g. I in 100 ml.  
 C6H6 is added to a solution of 1.7 g. VI in 30 ml. C6H6 and the mixture  
 refluxed to give 2.15 g. VII, m. 255-60° (pyridine-ligroine), and  
 bis(1-hydroxy-2-phenyl-3-indolyl) (VIII), m. 165°. A mixture of 2.75  
 g. I, 2.4 g. 2-phenylazopyridine, and 170 ml. C6H6 is refluxed 6 hrs. to  
 give 2.15 g. IV, m. 212-13° (EtOH), and a small amount II, m.  
 225°. A mixture of I, 2-phenyl-azopyridine, and ether is kept 4 days  
 at room temperature to give a small amount IV. A solution of 2.75 g. I in 150  
 ml.  
 C6H6 is mixed with a solution of 2.4 g. 3-phenylazopyridine and 20 ml. C6H6  
 and the mixture refluxed 6 hrs. to give VIII. A mixture of a solution of 4 g.  
 I  
 in 280 ml. C6H6 and a solution of 3.6 g. 4-phenylazopyridine in 20 ml. C6H6  
 is refluxed 8 hrs. to give a mixture of II and VIII.  
 IT 19971-22-3P 20678-42-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 19971-22-3 CAPLUS  
 CN 3H-Indole, 3-(1,2-di-2-pyridylhydrazino)-2-phenyl-, 1-oxide (8CI) (CA  
 INDEX NAME)



RN 20678-42-6 CAPLUS

CN Indole, 3-(1,2-di-2-pyridylhydrazino)-1-hydroxy-2-phenyl- (8CI) (CA INDEX NAME)



L13 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1968:29552 CAPLUS

DOCUMENT NUMBER: 68:29552

TITLE: Enamines. XVIII. N-Ylids in reaction with  
 N-heteroaromatic azo compounds

AUTHOR(S): Colonna, Martino; Bruni, Paolo; Guerra, Guido

CORPORATE SOURCE: Univ. Bologna, Bologna, Italy

SOURCE: Gazzetta Chimica Italiana (1967), 97(6), 1052-60

CODEN: GCITA9; ISSN: 0016-5603

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

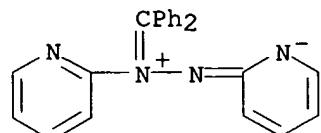
AB I and II are prepared from ylids of pyridinium salts. Thus, a mixture of a solution of 1.8 g. 2,2'-azopyridine (III) in 20 ml. C<sub>6</sub>H<sub>6</sub> and a solution of 1.9 g. 9-diazofluorene in 30 ml. C<sub>6</sub>H<sub>6</sub> is refluxed 90 min. to give I, m. 227-8° (C<sub>6</sub>H<sub>6</sub>-ligroine). A solution of 1.62 g. N-(9-fluorenyl)pyridinium bromide ylid in 20 ml. EtOH is treated with a solution of 1 g. III in 20 ml. EtOH, 20 ml. NaOH solution (prepared from 20 ml. 2N NaOH and 80 ml. EtOH) is added, and the mixture is agitated to give 1.1 g. I, m. 227-8° (C<sub>6</sub>H<sub>6</sub>-ligroine). Similarly prepared are (m.p. given): II (Ar = Ph) (IV), 184-5° (EtOH); II (Ar = 2-pyridyl) (V), 194-5° (EtOH). A solution of 1 g. IV and 25 ml. 10% HCl is heated to give quinoline-2-carboxaldehyde phenylhydrazone (VI), m. 204-5° (EtOH) and 2-(2-phenylhydrazino)pyridine. A solution of 0.5 g. V in 25 ml. 10% HCl is heated and PhNNH<sub>2</sub> is added to give VI, m. 204-5°, and 2,2'-hydrazobis(pyridine), m. 168° (water). Uv data are given.

IT 17170-59-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 17170-59-1 CAPLUS

CN Hydrazinium, 1-(diphenylmethylen)-1,2-di-2-pyridyl-, hydroxide, inner salt (8CI) (CA INDEX NAME)



~~A~~13 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1958:51276 CAPLUS

DOCUMENT NUMBER: 52:51276

ORIGINAL REFERENCE NO.: 52:9296c-e

TITLE: Antimicrobial activities of  $\alpha,\omega$ -bis(2,2'-dipyridylamino)-alkane bisquaternary salts

Gadebusch, H. H.; Cavallito, C. J.

Irwin, Neisler & Co., Decatur, IL

SOURCE: Antibiotics and Chemotherapy (Washington, D. C.) (1957), 7, 549-52

CODEN: ANTCAO; ISSN: 0570-3123

DOCUMENT TYPE: Journal

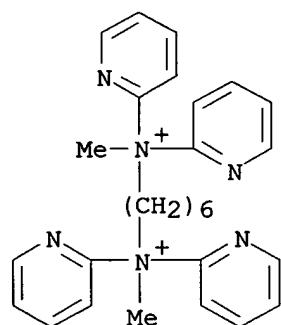
LANGUAGE: Unavailable

AB cf. C.A. 50, 12117g. Compds. I through V were prepared by the reaction of alkyl halides with tetrapyridylalkylenediamines  $Z2N(CH2)xNZ2.2RX$  ( $Z = 2$ -pyridyl) to yield quaternary salts, in which one pyridine ring of each  $Z2N$  group presumably was alkylated. I,  $x = 4$ ,  $RX = CH3I$ ; II, 6,  $CH3I$ ; III, 10,  $CH3I$ ; IV, 10,  $C2H5I$ ; V, 10,  $n-C5H11I$ ; VI, 10,  $HCl$ . Inhibitory activity markedly increased in proceeding from  $(CH2)4$  to  $(CH2)10$  linking chains. Among the  $C10$  linked compds. the nonquaternized derivative (VI) was relatively inactive compared with the alkylated diquaternaries (III, IV, and V). III and IV killed Trichomonas foetus at 1:10,000 in <3 min. No significant difference was evident in sensitivity of Staphylococcus aureus to III and IV after 32 transfers. The growth-inhibitory effects of the compds. was not related to surface-tension-depressant properties. Antibacterial activity was antagonized by anionic detergents and protein. The intravenous L.D.50 in mice of II and IV were 0.8 and 1.15 mg./kg., resp.

IT 124114-89-2, Ammonium, hexamethylenebis[methyldi-2-pyridyl-iodide] 124145-82-0, Ammonium, tetramethylenebis[methyldi-2-pyridyl- iodide]  
(bactericidal activity of)

RN 124114-89-2 CAPLUS

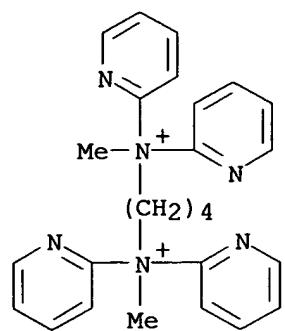
CN Hexamethylenebis[methyldi-2-pyridylammonium iodide] (6CI) (CA INDEX NAME)



●2  $\text{I}^-$

RN 124145-82-0 CAPLUS

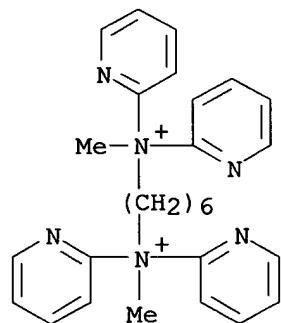
CN Tetramethylenebis[methyldi-2-pyridylammonium iodide] (6CI) (CA INDEX NAME)



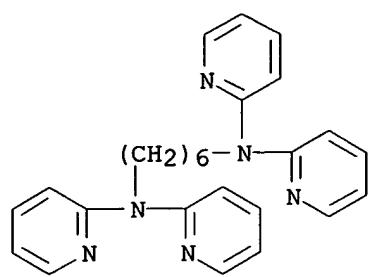
●2 I<sup>-</sup>

113 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1956:64819 CAPLUS  
 DOCUMENT NUMBER: 50:64819  
 ORIGINAL REFERENCE NO.: 50:12117g-i  
 TITLE: Tetrapyridylalkylenediamines  
 INVENTOR(S): Cavallito, Chester J.  
 PATENT ASSIGNEE(S): Irwin, Neisler and Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2732378		19560124	US	00000000
AB	Alkylene dihalides treated with the Na derivative of dipyridylamine in a hydrocarbon solvent gave tetrapyridylalkylene-diamines. Thus, NaH 4.8 (0.2 mol), di-2-pyridylamine 34.4 (0.2 mol) and dry PhMe 400 mL. refluxed 8 h. with stirring in a N atmospheric (this solution was used to react with the dihalides), Br(CH <sub>2</sub> ) <sub>6</sub> Br 24.4 (0.1 mol) added slowly, stirring and refluxing continued 16 h., the solution cooled, filtered, and the filtrate concentrated gave				
	an amorphous residue which, washed with a small amount of Skellysolve B to remove the excess of starting material, yielded 1,6-bis(di-2-pyridylamino)hexane, indefinite m.p.; di-MeI salt, m. 98-100° (decomposition). Also prepared was 1,10-bis(di-2-pyridylamino)decane; di-HCl salt; di-EtI salt, m. 72-82°; di-AmI salt, m. about 80°; di-MeI salt, m. about 88°. These compds. are said to be useful as antibacterial, antifungal and trichomonacidal agents, and as chemical intermediates.				
IT	<b>124114-89-2</b> , Ammonium, hexamethylenebis[methyldi-2-pyridyl-iodide] <b>855922-20-2</b> , Pyridine, 2,2',2'',2'''-(hexamethylenedinitrilo)tetra-				
	(preparation of)				
RN	124114-89-2 CAPLUS				
CN	Hexamethylenebis[methyldi-2-pyridylammonium iodide] (6CI) (CA INDEX NAME)				

●2 I<sup>-</sup>

RN 855922-20-2 CAPLUS  
 CN 1,6-Hexanediamine, N,N,N',N'-tetra-2-pyridyl- (5CI) (CA INDEX NAME)



D-3 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1956:16382 CAPLUS

DOCUMENT NUMBER: 50:16382

ORIGINAL REFERENCE NO.: 50:3436a-e

TITLE: Chemical properties of 2,2'-bipyridine. II

AUTHOR(S): Haginiwa, Joju

CORPORATE SOURCE: Chiba Univ.

SOURCE: Yakugaku Zasshi (1955), 75, 733-6

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

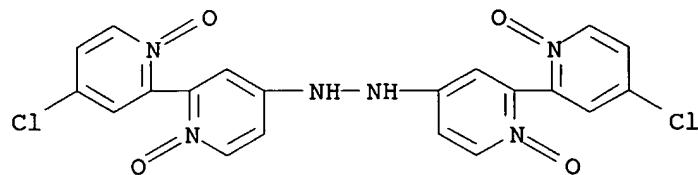
LANGUAGE: Unavailable

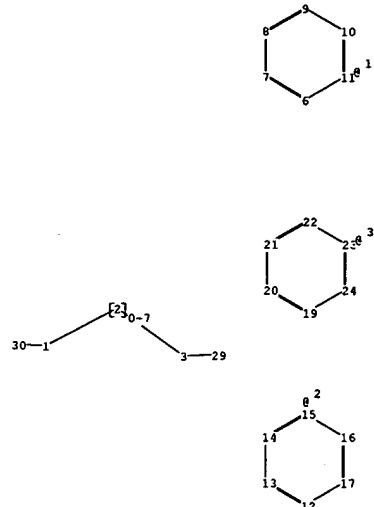
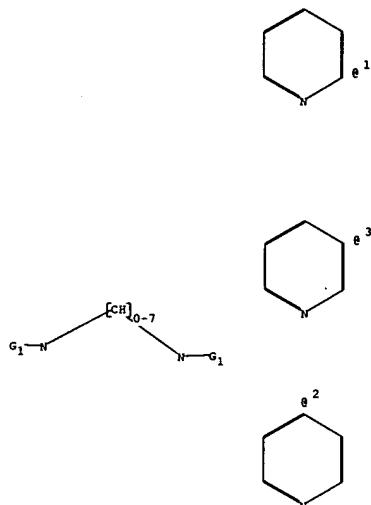
GI For diagram(s), see printed CA Issue.

AB III in concentrated HCl heated 4 hrs. at 100° yields a di-Cl derivative, C<sub>10</sub>H<sub>6</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>, m. 261° (decomposition), and in 30% H<sub>2</sub>SO<sub>4</sub>, heated 4 hrs. at 100°, yields a di-OH derivative, C<sub>10</sub>H<sub>8</sub>O<sub>4</sub>N<sub>2</sub>, m. 308° (decomposition). III (1.8 g.). 20 ml. PhCH<sub>2</sub>OH, and 0.3 g. Na in 15 ml. PhCH<sub>2</sub>OH let stand 48 hrs., the PhCH<sub>2</sub>OH removed, and the residue recrystd. from EtOH give 2.2 g. a di-PhCH<sub>2</sub>O derivative, C<sub>24</sub>H<sub>26</sub>O<sub>4</sub>N<sub>2</sub>, m. 228° (decomposition). III (1.5 g.) in 5 ml. PCl<sub>3</sub> heated 4 hrs. at 60°, the PCl<sub>3</sub> removed, the residue in water made alkaline with Na<sub>2</sub>CO<sub>3</sub> and recrystd. from EtOH gives 1.2 g. 4,4'-dichloro-2,2'-bipyridine (IV), needles, m. 143°; 1 g. IV in 200 ml. water heated with 6 g. KMnO<sub>4</sub> and 0.6 ml. H<sub>2</sub>SO<sub>4</sub>, the product filtered while hot and the filtrate cooled gives 0.05 g. 4,2-Cl(HO<sub>2</sub>C)C<sub>5</sub>H<sub>3</sub>N, needles, m. 183°. The NO<sub>2</sub> groups in III, therefore, must be in 4,4'-positions, and can be used as the HNO<sub>2</sub>-supplying agent; e.g., 0.5 g. III, 1 g. PhNH<sub>2</sub>.HCl, 4 ml. PhNH<sub>2</sub>, and 2 drops water heated 20 hrs. at 40-50° with 0.1 g. KI, the PhNH<sub>2</sub> steam distilled and the residue recrystd. from EtOH give H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>N:NPh, m. 126°. Catalytic reduction of III in concentrated HCl gives V, which is rapidly oxidized to the azo compound in air.

IT 854245-21-9, 2,2'-Bipyridine, 4,4''-hydrazobis[4'-chloro-, 1,1',1'',1'''-tetraoxide  
(preparation of)

RN 854245-21-9 CAPLUS

CN 2,2'-Bipyridine, 4,4''-hydrazobis[4'-chloro-, 1,1',1'',1'''-tetraoxide  
(5CI) (CA INDEX NAME)



chain nodes :

1 2 3 29 30

ring nodes :

6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23 24

chain bonds :

1-2 1-30 2-3 3-29

ring bonds :

6-7 6-11 7-8 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17 19-20 19-24  
20-21 21-22 22-23 23-24

exact/norm bonds :

1-2 1-30 2-3 3-29

normalized bonds :

6-7 6-11 7-8 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17 19-20 19-24  
20-21 21-22 22-23 23-24

isolated ring systems :

containing 6 : 12 : 19 :

G1:[\*1], [\*2], [\*3]

Match level :

1:CLASS 2:CLASS 3:CLASS 6:Atom 7:Atom 8:Atom 9:CLASS 10:Atom 11:Atom 12:Atom  
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom  
24:Atom 29:CLASS 30:CLASS